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للجودة والمطابقة
Abu Dhabi Quality &
Conformity Council

Abu Dhabi Guideline

دليل أبوظبي الإرشادي

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Abu Dhabi Guideline for Unified School Nutrition and Food Safety

دليل أبوظبي الإرشادي الموحد للتغذية والسلامة الغذائية في المؤسسات التعليمية

SUSTAINABLE DEVELOPMENT GOALS

This standard contributes to the following Sustainable Development Goals

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

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1. Amendment Page

To ensure that each copy of this technical document (Abu Dhabi Guideline) contains a complete record of amendments, the Amendment Page is updated and issued with each set of revised/new pages of the document. This ADG is a live document which can be amended when necessary. QCC operates the (school nutrition and food safety guideline) group which prepared this document and can review stakeholder comments to review and amend this document and issue an updated version when necessary.

Edition Number	Year of Approval	Number of pages	Sections Changes	Notes
1	2015	84	New edition	-
2	2018	25	All clauses in the Guideline have been reviewed	-
3	2022	40	All clauses in the Guideline have been reviewed	-
4	2025	63	Section 4: updated to align with reflect the new direction and objectives. Section 11: All nutrition requirements have been reviewed and updated. Section 6: Purpose revised to reflect the new direction and objectives. Section 7: Scope updated to align with the revised content and implementation framework. Section 3 and 5: as per QCC request to be updated once the guideline is finalized.	- Redefined the full concept of school nutrition, expanding beyond canteens to cover all foods consumed within school premises and related activities - This guideline should be regarded as 'minimum standards' enforceable through subsequent decrees and regulations (e.g. ADEK policy)

2. About the Abu Dhabi Quality and Conformity Council

Abu Dhabi Quality and Conformity Council (QCC) is an Abu Dhabi government entity established in accordance with Local Law No. (3) of 2009 to raise the quality of Abu Dhabi's exports and products traded locally. QCC consists of a council of regulators and industry with a mandate to ensure provision of quality infrastructure in line with global standards.

- QCC's functions are divided into six key areas:
  - Developing standards and specifications
  - Capacity building of metrology systems
  - Strengthening testing infrastructure
  - Launching conformity schemes
  - Protecting consumer interests
  - Ensuring fair trade
- QCC's key stakeholders include regulatory authorities, consumers, retailers and wholesalers, industry, conformity assessment bodies (CABs) and importers.

QCC supports regulators and government organizations through offering quality and conformity facilities, expertise and resources that allow them to implement products safety and compliance requirements and regulations. Additionally, QCC works towards promoting a culture of quality and protecting the interests of consumers. In doing this, QCC seeks to promote the Emirate's competitiveness to become one of the world's most attractive regions for investments and human capital, and to support the competitiveness of national industries in world markets.

3. Acknowledgement

QCC would like to thank the members of the Working Group listed below.

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4. Introduction

4.1 Rationale and Objectives

Abu Dhabi seeks to transform itself into a global reference for healthy living, ultimately achieving *"the most active population supported by a healthy food system within a health-conscious society."* Recognizing that childhood obesity, malnutrition, and chronic diseases pose urgent challenges, Abu Dhabi is committed to strengthening nutrition and food safety in educational institutions.

The **Unified Nutrition & Food Safety Guideline** is designed to harmonize standards across all schools in Abu Dhabi, establishing a consistent framework that supports the following **primary objectives**:

- **Establish a unified framework:** Implement a single set of standards for nutrition and food safety across all public, private, and charter schools in Abu Dhabi.
- **Guarantee nutritious, delicious, and balanced meals:** Ensure that every child has ready access to high-quality, appealing meals that meet stringent nutritional benchmarks.
- **Position Abu Dhabi as a global leader:** Set benchmarks that surpass international best practices, showcasing Abu Dhabi's dedication to top-tier school nutrition.
- **Foster whole-stakeholder compliance and improvement:** Develop a system for regular monitoring, auditing, and collaboration among all stakeholders to drive continuous improvement.
- **Enhance Food Education:** Reinforce healthy eating habits at school.

4.2 Key regulatory shifts

To fulfil these objectives, the guideline introduces several **key shifts** that redefine current practices and establish new norms throughout the education ecosystem:

- **Age-specific nutritional standards:** Introduce clear caloric and portion guidelines tailored to various developmental stages, ensuring appropriate nutritional intake for each age group.
- **Whole-meal approach:** Move beyond basic lists of "healthy items" toward a balanced meal plan, comprising roughly 50% fruits and vegetables, 25% whole grains, and 25% lean protein (plus dairy or substitutes).
- **Lunchbox alignment and empowered schools:** Require that home-packed meals align with school standards, granting schools the authority to confiscate non-compliant items and provide alternatives when necessary.
- **Fresh, local, and plant-based emphasis:** Prioritize freshly prepared, locally sourced, and plant-based options wherever feasible, while phasing out heavily processed foods.
- **Affordability, accessibility, and shared responsibility:** Promote cost-effective healthy meal solutions through collaboration among parents, vendors, schools, and relevant authorities (ADEK, MOE, ADPHC, ADAFSA), supported by oversight, audits, and training.

- **Continuous improvement and stakeholder engagement:** Require active participation from parents, students, and institutions in feedback mechanisms, rating systems, and audits, thereby institutionalizing a culture of healthy eating and ongoing quality enhancement.

5. Working Group

The Professional Working Group was organized by Abu Dhabi Quality and Conformity Council and established in April 2025, which was requested by Abu Dhabi public health center, to prepare Abu Dhabi Guideline for (the unified school nutrition and food safety requirements) in cooperation with the related stakeholders including representatives from government and private sectors.

6. Purpose

The purpose of this Guideline is to support the implementation of safe, healthy, and nutritious food practices in all schools across the Emirate of Abu Dhabi. It aims to establish a unified framework that ensures students are provided with food that meets both food safety regulations and nutrition requirements.

This Guideline seeks to achieve the following objectives:

(a) To outline the food safety requirements for schools and promote the provision of safe, properly handled food that meets approved procedures related to production, supply, storage, and distribution to ensure food safety and suitability for consumption.

(b) To establish nutrition requirements for all food and beverage offerings in schools and to promote a consistent, supportive school food environment that reinforces healthy eating behaviors, attitudes, and messages.

(c) To ensure coordinated participation and accountability among schools, food suppliers, food administrators, and relevant stakeholders in implementing and maintaining the requirements outlined in this Guideline.

(d) To provide schools with accurate and practical guidance on safe and healthy food handling practices. This Guideline serves as a key resource for training nutrition supervisors, specialists, nurses, and canteen supervisors on best practices related to food provision and safety.

(e) To ensure that all food supplied to schools is compliant with the food safety and nutrition requirements set forth in this Guideline.

7. Scope

7.1 Applicability:

This Guideline applies to all public, private, and Charter schools in the Emirate of Abu Dhabi, including kindergartens, primary, and secondary levels, as well as all food provided or consumed on school premises, including canteen meals, lunchboxes, vending machines, and after-school events, and any other food entry points in schools. The requirement of this guideline applies to all stakeholders involved in the school ecosystem including school management, food suppliers, and relevant government bodies responsible for oversight and enforcement.

The Guideline covers all aspects of food provision, handling, and promotion within school settings. It addresses the following components:

- Food safety and hygiene requirements for school canteens, food service providers, and kitchen facilities, including guidelines for food sale, preparation, handling, and disposal.
- Nutritional requirements for the types of food and beverages permitted to be served or sold in schools, along with tools to support school health staff, nutrition specialists, and administrative personnel in promoting healthy eating patterns.
- Conformity mechanisms required by relevant authorities and implementing entities to ensure that food supplied to schools complies with the technical and nutritional requirements outlined in this Guideline.
- This guideline is applied alongside the relevant UAE standards and technical regulations.

7.1 Feedback and queries

The Abu Dhabi Quality and Conformity Council (QCC), acting as convenor of the Healthy Meals in Schools Technical Working Group, shall serve as the single custodian of these Guidelines. All feedback, clarifications, and implementation queries submitted by schools, food providers, government entities, or the public must be directed to QCC, which will log and assess each submission and, where necessary, relay it to the competent authority (e.g., Ministry of Education, ADEK, ADAFSA, ADPHC, etc.) for action or response. QCC will maintain an up-to-date record of such consultations and shall coordinate periodic reviews of the Guidelines to reflect evolving mandates, evidence, and stakeholder responsibilities.

8. Terms and definitions

Term		Definition
8.1	**The State**	The United Arab Emirates.
8.2	**The Emirate**	The Emirate of Abu Dhabi.
8.3	**Authority**	Abu Dhabi Agriculture and Food Safety Authority
8.4	**Institutes**	Abu Dhabi Vocational Education and Training Institute (ADVETI) & Applied Technology Institute (ATI).
8.5	**School Cafeteria (Canteen)**	The equipped place for the distribution and selling of foods allowed within the educational establishment and places of their preparation.
8.6	**People of Determination C enters**	Social organizations that are in charge of the care and rehabilitation of disabled children and persons for enabling them to integrate within the society and attain the maximum possible amount of social and economic independence in their life, by their undertaking of certain tasks in this regard.
8.7	**Educational Institutions**	The private and Charter schools of Abu Dhabi Emirates and the special centers of the people of determination by Zayed Higher Organization for People of Determination (ZOH)
8.8	**Food Establishment**	A legal person holding a license to practice any food activity, whether through a permanent or temporary fixed or mobile facility.
8.9	**Food**	Any substance or part of a substance intended for human consumption by eating or drinking, whether it is a raw, manufactured, or semi-processed substance, including beverages, bottled drinking water, chewing gum, and any substance used in the manufacture of food preparation and processing, but it does not include cosmetics, tobacco or substances that are used only as drugs.
8.10	**Drinking Water**	Pure and healthy water at the stage of its use for drinking purposes and in conformity with the technical requirements and regulations issued by the Ministry of Industry and Advanced Technology.

Term		Definition
8.11	**Cross Contamination**	The transmission of harmful substances or pathogenic microorganisms to food by hands, surfaces in contact with food, equipment and tools that are dirty and in contact with raw food and then come into contact with ready-to-serve food. It also includes contact with raw food or the resulting liquid for ready-to-serve food.
8.12	**Pest**	Insects, birds, rodents and other animals capable of causing food contamination either directly or indirectly.
8.13	**Food Intolerance**	It is a delayed immune reaction that occurs when nutrients with large molecules enter the blood (not fully digested) for various reasons, which lead to the formation of antibodies to them in the blood. Symptoms of food intolerance appear primarily with digestive disorders. Examples of food intolerances include lactose intolerance and gluten intolerance.
8.14	**Raw Food**	Food that has not been processed or cooked and is not suitable for human consumption.
8.15	**Fruit Nectar**	The non-fermented but fermentable products obtained by adding water, with or without adding sugars, and as stated in the UAE technical regulation for Fruit Juices and Nectars UAE.S GSO 1820.
8.16	**Food Establishment Manager**	the natural or legal person licensed and responsible for the obligation to implement the provisions of this law and the regulations, by laws and decisions issued pursuant there to in the facility under his responsibility.
8.17	**Canteen Supervisor**	the person nominated by the administration of the educational institution to supervise the affairs of the cafeteria.
8.18	**Licensee**	A natural or legal person who has a valid license to engage in any activity related to food or feed handling.
8.19	**Food Handler**	Any person who directly or indirectly handles food.
8.20	**Natural Fruit Juice**	It is obtained by direct mechanical extraction processes, according to UAE.S GSO 1820.

Term		Definition
8.21	**Ready-to-eat food**	food intended for direct human consumption without taking any subsequent steps to dispose of microorganisms
8.22	**Food Label**	Any tag, clarification, mark, brand, picture or pictorial or other descriptive matter, written, printed, stamped, placed, engraved or embossed or impressed on the food package in such a way that cannot be detached from the package or removed. (Including attached to, a container of food, without prejudice to the interests of consumers as deemed appropriate by relevant authorities).
8.23	**Perishable food**	Food subject to rapid contamination, or / and prone to the growth of pathogenic microorganisms, whether with the formation of toxins or metabolic substances, or without them, to the extent that may cause risks to human health.
8.24	**Primary product**	The product resulting from primary production processes and includes agricultural products, storage for agriculture, hunting and fishing.
8.25	**Energy drinks**	A beverage that typically contains large amounts of caffeine, added sugars, other additives, and legal stimulants such as guarana, taurine, and L-carnitine.

9. General Requirements

9.1 Duties & Responsibilities of the Educational Institutions Department

The school or relevant educational institution shall adopt a program to provide students and employees with healthy nutrient-rich food, while avoiding excessive consumption of food with low nutritional value. The school shall fully comply with the rules and requirements specified by Abu Dhabi Public health center (ADPHC) in this regard.

The school shall also obtain the necessary and effective licenses and maintain inspection records and notifications. The Food Services Policy (Policy 63) established by ADEK follows the "School Cafeteria Standards" regarding the appropriate management of School cafeteria facilities, food safety and hygiene, and by Abu Dhabi Public Health Centre (ADPHC) regarding nutrition and healthy eating in schools, healthy food choices and food allergies.

Any school wishing to provide food services for students and staff may do so through a school cafeteria during the school day. These schools shall maintain a record of related valid licenses, inspection visits and notices.

The food serving process shall always comply with the requirements of the ADAFSA, ADEK, and ADPHC and the requirements stipulated in the "Abu Dhabi Guideline Food Guidelines in the Educational Institutions".

These requirements are related to School canteen facilities management, school cafeteria health conditions, nutrition and healthy-eating standards, school cafeteria suppliers and reporting food-related complaints including cases of food poisoning.

Schools offering a food service through a school cafeteria shall develop a healthy eating and nutrition policy and distribute it to school staff, students, and parents / guardians. This policy shall include a commitment to promote and encourage students to develop healthy eating habits by supporting the provision of healthy nutrition for all members of the school community.

Schools are expected to maintain a healthy environment and promote and encourage a healthy lifestyle through education using both the curriculum and extra-curricular activities.

- **Roles and Responsibilities:**

a) Schools will:

- Oversee food service provided by the school to ensure that such services conform in full to the standards required by ADAFSA and ADPHC and any other relevant official authorities in this regard.
- Maintain a record of all food-related complaints and outlining procedures duly taken in that regard.

b) Principals and/or Administration will:

- Ensure that any food service provided by the school conforms in full to the standards required by ADEK, ADAFSA and ADPHC.
- Ensure that all requirements, specifications and procedures for school cafeteria facilities, hygiene and safety, nutritional requirements, and food supplier requirements are followed by the school as specified in this guideline.
- Ensure that the school cafeteria complies with all current regulations of ADPHC and ADAFSA, and that any inspections required by ADFSA or the Council at any time are facilitated.
- Ensure full compliance with the process for filing food-related complaints and, in particular, when related to cases of food poisoning or cases of suspected food poisoning
- Develop and distribute a school policy on healthy eating and nutrition.
- Ensure a full understanding of roles and responsibilities in relation to this policy, and any additional responsibilities that are specified in the "Abu Dhabi Guideline Food Guidelines in the Educational Institutions".
- Provide evidence of fulfilling such obligations to the Council upon request or upon the license renewal

ADEK is responsible for supporting ADAFSA and ADPHC to ensure that schools are appropriately licensed by the relevant authorities to operate a cafeteria, food storage and handling and that the licenses are updated and valid.

9.1.1 Supplier / Facility Official's Obligations

A supplier / food facility official shall comply to the following:

(a) application of the requirements, terms and conditions for licensing food facilities and the policies approved by the Authority in this regard.

(b) application of all the standards stated in this Guide ongoingly, including the foods that are served in the canteen, the kitchen or vending machines at all the educational institutions that are being served thereby.

(c) obtain the licenses and permits required by the concerned authorities for the facilities thereof by which food handling services are being provided at educational institutions.

(d) performance of the conditions of contracts with the governmental authorities and the concerned educational institutions as in relation to the processes of supply thereto.

(e) coordinate with the administration of the educational institutions in order to become aware of the individual food needs and differences of students and in order to meet the same.

(f) meet health fitness stipulations of food handlers, as are issued by the concerned authorities in this regard.

(g) provide all documents and records at the site / canteen / food facility, including for example, but without limitation, the supply permit for an educational institution, pest control contract, etc.).

(h) Any other obligations that are specified by the concerned entities or under a resolution or a bylaw.

9.1.2 Compliance with UAE technical regulations

- In addition to what is stated in the UAE Technical Regulation No. UAE.S GSO 1971, which relates to Hygienic conditions for School Canteens and handled food, the parameters outlined in this guideline shall be applied.
- This guideline shall be implemented in conjunction with other relevant UAE technical regulations.

10.Health Requirements and Practices

10.1.1 Health requirements for Food in the Educational Institutions

10.1.1.1 Location, Design and Structure

1) The location of the food establishment of the educational establishment must be appropriate, and the establishment must be kept clean and in good condition.
2) It should not be located anywhere that may pose a clear threat to the safety and suitability of food, after taking into account the preventive measures and procedures.
3) The size, planning, design and construction of the educational institution/food establishment should achieve the following:

- Allowing appropriate maintenance, cleaning and/or disinfection to be carried out.
- Reducing air pollution, providing sufficient workspace, freedom of movement, and preventing congestion, taking into account the importance of the workflow path being appropriate to allow operations to be performed in a healthy manner.
- Protection against dirt build-up, condensation, contact with toxic substances, breakage and splashing of particles in food and the formation of unwanted mold on surfaces that may cause direct food contamination.
- The internal structure of the food establishment shall be made of solid and strong materials that are easy to maintain, clean and disinfect when necessary.
- Allow the application of good hygiene practices including protection from cross-contamination and entry or pest infestation
- Separate processes that may cause cross-contamination by placing spacers, appropriate dimensions of distance, location or other effective means.
- Providing adequate temperature and humidity control conditions of adequate capacity when necessary.
- The construction sites and methods for the construction and building of towers, elevators and auxiliary structures (such as platforms, ladders, and chutes) should be such as to prevent food contamination and provide the chutes and yards with holes for cleaning.
- Buildings must be maintained to prevent pests from entering and to remove sites prone to pest proliferation. Tight closure for holes, water drains and other entrances that may constitute a potential source of these pests.

4) The following conditions for the ventilation facilities must be fulfilled:

- To be suitable and sufficient, whether natural or mechanical, while avoiding any mechanical flow of air from a polluted area to a clean area.
- The ventilation openings shall be fitted with filters or a protective fence made of non-corrosive materials, taking into account easy access to filters and parts that require cleaning.

- Ventilation shall be sufficient to reduce food contamination from air and to control ambient temperature, odors and humidity.

5) The lighting devices and equipment must comply with the following conditions:

- To provide sufficient lighting, whether natural or artificial, to be able to work in a healthy manner, and that the intensity of lighting be appropriate to the nature of the work.
- Lighting equipment and electrical wiring should be protected in a manner that allows easy cleaning and prevention of cross- contamination.

10.1.1.2 Equipment & Tools

1) The following requirements must be satisfied in packaging materials (except for those designed for one-time use) and in direct food contact:

- It shall be made of materials that do not cause the transfer or migration of toxic substances, odors, or tastes to food.
- Must be non-absorbent and resistant to corrosion factors, and to withstand repeated cleaning and disinfection operations.
- Must be able to be cleaned effectively and, when necessary, to disinfect after cleaning, with the exception of non-returnable packaging materials, and to be suitable for frequent cleaning and disinfection operations to avoid the risk of contamination.
- Must be in good condition and easy to repair and maintain to reduce the risk of contamination.
- Must be installed in a way that allows cleaning of equipment and its surroundings.
- Must be strong and movable or dismantlable to allow maintenance, cleaning, disinfection, and pest monitoring. Moreover, and where necessary, the washing and cleaning of large-sized equipment should be carried out in separate facilities.
- The equipment and tools used for food cooking, heat treatment, refrigeration, storage or freezing shall be designed in a way that allows reaching the required temperatures with the necessary speed and allowing them to be maintained effectively.

2) In the case of using chemical additives that prevent corrosion of equipment and containers, their use must be in accordance with their intended purpose, and according to the manufacturer's instructions, in a manner that does not allow any contamination to occur in food or renders it unfit for human consumption.

3) The following conditions must be met in cleaning materials, disinfectants and any materials or tools that are likely to have contact with food or the transfer of some components to it:

- Must be in conformity with the requirements for the materials that are used for the purposes of food use.

- Must be identified and stored in areas separated from food handling areas, food contact surfaces, or food packaging materials in a manner that prevents any contamination of food.

10.1.1.3 Food Handling Areas

- Food must be protected during all stages of the food chain against any contamination that would make it unfit for human consumption or make it unhealthy or contaminated to the extent that it cannot be consumed.
- Floor surfaces should be made of materials that are non-toxic, water repellent, non-absorbent, non-slip and washable. In order to allow proper cleaning and surface drainage works, the floor slope level must be sufficient to drain liquids into tight outlets (drains), where appropriate.
- Surfaces of walls and partitions shall be made of materials that are not a potential source of toxins, impervious, water-resistant, non-absorbent, airtight, washable and light-colored. Furthermore, walls must be smooth and polished wherever possible, of appropriate height and easy to clean and cleanse. Additionally, ceilings (or the interior of the roof if there is no ceiling) and overhead fittings shall be made of materials that are non-polluting and easy to clean, made of light-colored materials, and designed and polished to prevent dirt build-up and to limit condensation or growth of unwanted mold or particle shedding.
- Windows and any other openings shall be constructed to prevent the accumulation of dirt and shall be fixed or kept closed in locations where opening them may cause contamination.
- Windows that open to the outside environment should be provided with easy-to-remove, cleanable and insect-proof filters where appropriate.
- Interior window threshold (if present) should be tilted to prevent them from being used as shelves
- Corners, whether between walls themselves, between walls and floors, or between walls and ceilings, must be sealed and covered to facilitate cleaning operations.
- The surfaces of the doors must be made of polished, non-absorbent and easy to clean material, and when necessary for disinfection and self-closing. Work surfaces, surfaces of equipment and tools in contact with food should be made of materials that do not constitute a potential source of contamination and are easy to clean and do not form or contain burrs that are washable and rust-proof and must be maintained in a proper condition, and they should allow cleaning and disinfection work to be carried out easily.
- All structures and installations must be installed in a manner that prevents food contamination, either directly or indirectly (by condensation and dropping) and should not be an obstacle during cleaning operations.

- Effective measures and procedures must be taken to prevent cross-contamination by ensuring that raw food is separated from food in the processing stage, and food that is ready to be served, including utensils, equipment and cutting boards.
- Facilities for washing hands must be provided so that they are separated from the facilities designated for washing foodstuffs, and they must be provided with running water suitable for drinking at an appropriate temperature, preferably of the type that is not operated by hand.
- Adequate facilities must be provided where necessary to clean, disinfect and store work tools and equipment so that these facilities are easy to clean and made of rustproof materials, and where appropriate they are adequately supplied with hot and cold water. Food washing areas should be separated from areas designated for washing utensils or equipment, and all areas should be kept clean and, and where appropriate, they must be disinfected after cleaning.
- Food washing areas, hand washing areas, and areas for washing utensils or equipment must be provided with hot and cold potable water.
- All necessary measures and procedures must be taken to protect food from the possibility of contamination during the display, and separate serving tools should be provided for each type of food or any means that would reduce the possibility of food contamination.
- Procedures must be provided to control pests and prevent pets from reaching the places where food handling or storage is prepared.

10.1.1.4 Food Handlers' Health & Personal Hygiene

It is not permissible for food handlers suffering from a disease or who carry a disease that may be transmitted through food to circulate food or to be present in its circulation areas whenever they are likely to cause contamination, whether directly or indirectly.

- Wounds of injured persons who are allowed to work in food handling areas must be covered with appropriate waterproof covers.
- Food handlers shall maintain a high level of personal hygiene and wear clean, appropriate, and protective clothing when handling food, including head coverings, gloves and beard covers.
- Food handlers must wash and sanitize hands constantly in the designated areas before starting work on food handling activities, and immediately after any use of health facilities or lavatories, and after handling any food, including raw or any contaminated material.
- Food handlers shall refrain from any behavior that may contribute to food contamination, such as wearing jewelry, smoking, spitting, chewing, eating, sneezing, coughing on exposed food or any similar behavior.

10.1.1.5 Primary Products

The food facility must have adequate facilities and necessary procedures to ensure the effectiveness of cleaning operations, and to ensure that an appropriate level of personal hygiene is maintained.

-The food establishment official must: Ensure that all primary products and all subsequent manufacturing processes of primary products are protected from contamination.

- Avoid using areas that pose a food safety hazard.
- Apply the necessary practices and measures to ensure that food is produced under appropriate hygienic conditions.
- All facilities, equipment, containers, and means of transport used in the primary production process and associated processes, including those used for handling and storing food, must be kept clean and properly disinfected after cleaning when necessary.

10.1.1.6 Temperature Control

Food should be kept at the following temperatures:

- Chilled food - at a temperature below (5 ^{o}C) degrees Celsius.
- Frozen food - at a temperature of (-18 ^{o}C) degrees Celsius or less.
- With the exception of chilled and frozen food, all foods - including long-term food - is at appropriate temperatures that prevent causing any risks to human health, and according to the appropriate temperature for each food item.
- The cooking temperature and the time associated with it shall be sufficient to ensure that heat reaches the food medium and to eliminate any pathogenic microorganisms, so that the minimum temperature in the food medium reaches (70^{o}C) degrees Celsius for two minutes or its equivalent.
- Appropriate conditions must be provided for temperature control during food handling and storage operations, provided that they have sufficient capacity to keep food at appropriate temperatures and designed in a way that allows, when necessary, monitoring and recording of temperature readings, as well as ensuring that food is protected from direct exposure to sunlight.
- Food defrosting operations must be done in a way that reduces the risks of the growth of pathogenic microorganisms or the formation of toxins in the food by exposing it to temperatures that do not cause health risks.
- Cooked food, which presents a potential hazard, should be served at a temperature below (5^{o}C) degrees Celsius, or above (60^{o}C) degrees Celsius and for a period of no more than four hours after heating.
- Temperatures must be monitored and checked during the stages of the food chain in order to ensure food safety and to ensure that it is kept at the proper temperatures.

- In the event that perishable food that is ready to serve, which may present a potential hazard, is exposed to temperatures above or equal to (5°C) and less or equal to (60°C), the following measures must be taken:
  - Cool or reheat food for direct consumption if the time period is less than two hours.
  - Dispose of food and destroy it immediately if the time period is two hours or more.
  - In the event that the temperatures of the chilled food are not maintained, the following measures should be taken: Return the temperature as quickly as possible to less than (5 ºC) c if the food temperature is higher or equal to (5ºC) and less or equal (8 ºC).
  - Disposing of food and directly destroying it in the event that the food temperature is higher than (ºC 8) unless the authority is provided with an acceptable justification based on scientific foundations about food safety and suitability.
  - In the event that the temperatures of the frozen food are not maintained, the following measures should be taken:
  - Return the temperature as quickly as possible to (-18ºC) or less in case the food temperature is between (-15ºC) and (-18ºC)
  - Performing visual inspection and laboratory examination if the food temperature is higher than (-15ºC) and less than (-10ºC)
  - Consume food directly if the temperature is (-10ºC)
  - Disposal of food and its destruction if the temperature is higher than (-10ºC) or if there are indications of food defrosting unless the authority is provided with an acceptable justification on the basis of scientific foundations about food safety and suitability.
  - All food coolers or freezers must be equipped with accurate temperature measuring equipment (+/-1ºC) The food establishment official must keep records of the temperature readings of the refrigerant or food freezing equipment, as well as the documentation of calibration and maintenance of thermometers for a period of at least one year.
  - Temperature measuring devices should be checked periodically and regularly, along with accuracy acceptable limits for both temperatures and associated time periods.

10.1.1.7 Food Display & Packaging

- Raw food presented in refrigerators and freezers must be separated appropriately from food ready to eat to prevent contamination.
- Water and/or ice that will come into direct contact with food must be from a potable water source, and from a clean water source in the case of complete cooling of fish products, provided that they are handled and stored under conditions that protect them from contamination.

- The temperatures of coolers and refrigerators must be maintained at all times and effective precautions should be taken in the event of a power outage.
- When displaying unpackaged food and food that is ready to serve, the following must be adhered to:
  - The display should take place behind protective barriers and at appropriate temperatures to prevent the possibility of food contamination.
  - Provide separate serving utensils for each food or any other means that would reduce the possibility of food contamination.
- All equipment and tools used on food display surfaces must be classified as permitted for food use, chemically inert, and easy to clean and sterilize before use.
- Food must be removed from the display when it exceeds the declared tab for the period of “expiration date” or “best before” or “used until the expiry date of...” and to be disposed of where appropriate.
- The official of the food establishment/educational institution, when removing food from its original packaging for the purpose of display, must ensure that the food expiration period and other food safety information is clarified at the point of sale.
- Temperatures in display cabinets and service provision corners must be monitored while keeping records in accordance with the provisions relating to temperature control contained in Regulation No. (6) of 2020 issued by the Authority.
- If ice is used for cooling purposes, sufficient quantities must be used to maintain the proper temperature.
- The materials used in packaging must not be a source of danger or contamination.
- Packaging materials must be stored in a manner that does not expose them to the risk of contamination.
- The design and materials used in packaging must be sufficient to provide adequate protection for the food to reduce contamination and prevent damage and allow the necessary information to be placed on the food label.
- Packaging processes must be carried out under conditions that allow controlling temperatures to avoid food contamination, and the safety and cleanliness of the packaging must be ensured, especially if metal and glass containers are used.
- Packaging materials that are approved for reuse for food should be easy to clean, and disinfected if necessary.

10.1.1.8 Food Transportation & Storage

- Foodstuff must be transported at appropriate temperatures, and in a manner that prevents contamination and maintains its safety.
- Means of transporting food, including reusable containers, must be kept clean, and ensured that they are maintained to protect food from contamination.

- The interior of such means must be insulated with a smooth, cleanable and waterproof surface lining.
- Food must be separated from non-food items during transportation.
- Ready- to- eat food should be separated from raw food to prevent cross contamination if they are transported by the same means of transportation.
- Food should be placed in such a way as to leave enough space away from the walls and above the floors in order to avoid any spread of pests, and to allow easy cleaning and proper ventilation.
- A license to transport food must be obtained.
- Means of food transportation must be designed and designated to maintain the appropriate temperature for food, in accordance with the provisions related to temperature control stipulated in Regulation No. (6) of 2020 issued by the authority, allowing temperature monitoring and recording during the transportation period while keeping records for a period of one year.
- Raw materials should be inspected, washed and/or cleaned as necessary to the extent necessary to remove dust or other contaminants, and water used for washing or transporting food should be potable water.
- The conditions for storing raw materials and all food ingredients in the food establishment must be appropriate and prevent pollution and spoilage, provided that the storage is above the ground and away from the walls.
- Cooling and / or freezing containers of sufficient size must be provided to store raw materials and food within the temperatures specified in s Regulation No. (6) of 2020 issued by the Authority.
- Raw materials, food ingredients or intermediate or final products that provide a suitable environment for the reproduction of pathogenic microorganisms or those that produce toxins should not be stored within temperatures that would lead to health risks.
- Materials with potential sources of risk and / or material that is not to be eaten, including animal feed, must be labeled and stored in separate, sealed containers.

10.1.1.9 Food Waste

- Food waste, inedible by-products and other waste must be separated and removed from food premises as soon as possible to avoid their accumulation and to avoid creating any risks arising from cross-contamination.
- Food waste, inedible by-products, and other waste should be stored in resealable containers and disposed of properly, made of suitable materials, leak-proof, waterproof and easily cleanable or damaged.
- Containers used for the purpose of storing hazardous materials must be labeled and identified and closed when needed to prevent food contamination.

- Adequate work procedures should be developed and implemented for the storage and disposal of food waste, inedible by-products and other waste.
- Waste storage facilities shall be designed and managed to ensure that the facility is kept clean and free from animals and insects.
- Waste areas should be equipped with washing facilities of suitable efficiency, and sites should be cooled where necessary.
- Waste and waste must be disposed of in a healthy and environmentally friendly manner.

Section 11: Nutrition Requirements

11.1 Introduction to School Nutrition Requirements

11.1.1 Purpose

The aim of the school nutrition requirements is to support student health, well-being, and academic performance by ensuring access to nutritious, and culturally appropriate food and beverages during the school day. The Abu Dhabi Public Health Center (ADPHC) establishes and oversees these requirements in alignment with national health priorities and international best practices, ensuring that all food offered in schools promotes healthy eating habits, prevents nutrition-related diseases, and contributes to creating supportive food environments across educational institutions.

11.1.2 Key Principles

The nutrition requirements in schools are built on the following key principles:

1. **Health Promotion:** Ensure all foods and beverages provided in schools contribute to the health, well-being, and optimal growth of students.
2. **Balanced Nutrition:** Promote meals that meet age-appropriate nutritional needs, emphasizing whole foods, vegetables, fruits, whole grains, lean proteins, and healthy fats.
3. **Prevention-Oriented:** Reduce the risk of childhood obesity, non-communicable diseases, and related health concerns through healthier food environments.
4. **Cultural and Religious Sensitivity:** Respect the cultural, religious, and dietary preferences of students, including halal requirements.
5. **Equity and Accessibility:** Ensure all students, regardless of background, have access to nutritious, and accessible food options.
6. **Evidence-Based:** Align requirements with international dietary guidelines and national health priorities.
7. **Sustainability:** Encourage environmentally sustainable food choices where possible.

11.1.3 Scope

These nutrition requirements apply to all food and beverage offerings within schools across Abu Dhabi, including:

1. School canteens and cafeterias
2. Food served during school-sponsored activities, events, or celebrations
3. Vending machines and food kiosks on campus
4. Food brought from home (lunchboxes) under school monitoring requirements
5. Meals and snacks offered through SEHHI-approved programs

6. Packaged and prepared snacks offered by vendors within school grounds

The requirements apply to the following school levels, including KG, primary, middle and secondary schools, and should be implemented by:

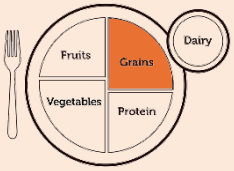
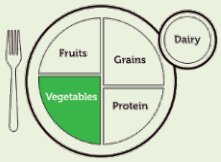
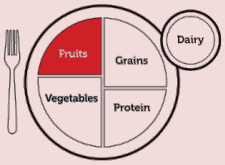
- School leadership and staff
- Canteen operators and food vendors
- Parents and guardians (where applicable)
- Government and regulatory bodies overseeing school health and nutrition

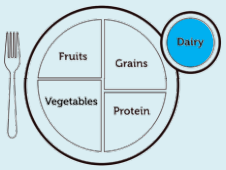
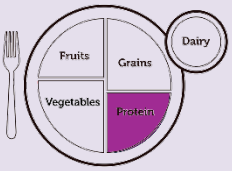
11.2 Composition of a Balanced School Meal

11.2.1 Healthy Plate Model

MyPlate provides a simple visual guide to help ensure balanced nutrition by dividing the plate into five food groups: fruits, vegetables, grains, protein, and dairy. Each group has specifically recommended serving sizes to promote a healthy diet. These guidelines help to serve nutritious meals that support students' growth and development. Please refer to **appendix 1**: **my plate** to get more information about the main concepts of my plate model and refer to **table 1 MyPlate Serving Size Recommendations** below to Know the division of healthy plate division.

Table 1: MyPlate Serving Size Recommendations

Grains	This group includes breads, grains, rice and macaroni, with recommending eating half of the quantity of unpeeled whole grains, as the peel contains several vitamins, minerals and fibres. (Grains are among the basic groups on which the body depends for the maintenance of the body's several functions that provide us with energy and vitality).	 **A quarter of the dish shall contain whole grains.**
Vegetables	It is advised to eat all vegetables, especially those of prominent colours, such as dark green, orange, yellow and red	 **Half of the dish shall contain vegetables and fruits.**
Fruits	It is advised to eat various fruits.	

		Half of the dish shall contain vegetables and fruit.
Diary	It is advised to have milk every day or low-fat dairy products. As for those individuals who are suffering of lactose intolerance, it is advised to provide another source of dairy, such as unsweetened coconut milk.	 **At least 3 portions of products that are rich in calcium**
Protein food	This includes chicken, fish, eggs and legumes, such as kidney bean, lentil, chickpeas and red meats which are advised to be eaten in the form of lean meats.	 **Quarter of the dish shall contain protein.**

11.2.2 Table 2: Food Classification

Green List (11.2.3) Always available	Foods and beverages categorized as Green are the best choices for the school canteen menu as they contain a wide range of nutrients, and are generally low in fat, sugar, or sodium/salt, and higher in fiber. These foods and beverages should be: ▪ Available everyday ▪ Included as the main choices in the canteen menu ▪ Presented in an appealing way ▪ Promoted as a healthy and nutritious choice
Red (11.2.4) Not recommended	Foods and drinks categorized as Red are low in nutritional value and may contain excess energy (calories), fat, sodium (salt), or sugar. These foods and drinks should: ▪ Not be provided in schools

11.2.2 Recommended Food and drinks (Green List)

Most of the foods and drinks offered or sold in the schools must fall within "the green list" as identified in table 2 above meaning that the selection of such foods is the healthiest and most nutritionally valuable and therefore must be chosen for each food group. With each food group, the foods that fall into this category will be identified below for the purpose of making it easier to be selected and provided.

Table 3: Recommended green list from each food group *

Grains Group
Grains from Green Selection: Whole grains must be the first component, as sugar cannot be the first or second ingredient (sugar comes with various forms, such as honey, molasses, fruit juice, and fruit concentrate). The possible examples for this category shall be whole grain bread, whole grain tortilla, whole grain pasta, whole grain Arabic bread, brown or wild rice, barely or quinoa, unsweetened or low sugar whole grain and unsweetened oat flour.
Fruits & Vegetables Group
Fruits & Vegetables from Green Selection Category: Food belongs to fruits and vegetables group if sugar is the first or second ingredient (Sugar comes in various forms such as honey, molasses, fruit juice and fruit concentrate. The vegetables and fruits juice must be 100% usweetened, and with such juices, water could be the written as the first ingredient. However, it must be ensured that juice not contain the statement "*Made from real fruit juice*" or "*beverage, cocktail, drink".* Green selections category from vegetables and fruits are the foods that do not contain sugar, salt, or added fats. Some possible examples for that are the fresh or frozen fruits and vegetables without added sugar, salt fats and salsas.
Milk & Products Group:
Milk & its Substitutes from Green Selections Category: Pasteurized milk, unsweetened milk, Full-fat milk or low-fat milk and their substitutes, such as plain and unsweetened yogurt.
Meat & its Substitutes Group
Meat & its Substitutes from Purple Selection Category: They are prepared with little fat, salt or sugar or without it and without the skin. The possible examples for such category includes roast beef, grilled chicken or fish, low-fat minced meat, cooked eggs, canned tuna, salmon, chicken without salt or added oil, cooked beans, peas, lentils, unsweetened and unsalted seeds.

*: The above-mentioned food and drinks are examples of items that fall within the green list but are not limited to them.

11.2.2 Restricted Foods and Beverages (Red List)

This section clarifies items that are prohibited from being sold or served in school premises as identified in table 2. This restricted item list ensures minimal exposure to excess fat, sugar, additives, and common high-risk allergens. Schools and canteen operators must carefully verify labels and preparation methods. The aim is to uphold student health through restrictions on these higher-risk, nutritionally empty, or allergenic foods. By strictly avoiding the categories below—and substituting them with healthier, compliant options—schools can foster a supportive, health-conscious food environment that protects students' well-being and reinforcing nutritious choices.

11.2.4.1 High-Fat and High-Sugar Foods

- **Deep-fried Foods:**
  - **Examples:** Fried chicken, falafel, samosas, fries, and other deep fried food options.
  - **Reason:** High oil absorption leads to elevated saturated/trans fats and extra calories.

- **Alternatives:** Oven-bake or roast chicken, baked falafel, or potatoes to achieve a crisp texture without deep frying.

- **Sweet and Desserts with Excess Sugar/Fat**
  - **Examples**: Cakes, donuts, croissants, sweet pastries, marshmallows, candy, lollipops, ice cream, slushies, chocolate (less than 50% cocoa), and other high fat and sugar dessert options.
  - **Reason**: Contribute to excessive sugar, saturated fat, and empty calories that can undermine dental health and weight management.
  - **Alternatives**: portion controlled Whole-grain muffins with minimal sugar, fruit-based desserts, dark chocolate (more than 50% cocoa). Refer to section 11.4.2 table 7 for the accepted baked good portions.

11.2.4.2 Unhealthy Beverages

- **Soft Drinks (All Types)**
  - **Examples:** Regular, diet, or zero-calorie artificially sweetened sodas.
  - **Reason:** Often high in sweeteners (sugar or artificial) and phosphates, high in caffeine, lacking nutritional value.
  - **Alternatives:** Water, carbonated water, unsweetened fruit-infused water, low-sugar 100% fruit juices (max 200 ml).

- **Energy & Sports Drinks**
  - **Exception:** Energy and sport drinks are not allowed but Isotonic sports drinks can be allowed under specific conditions as clarified in section 11.7.4
  - **Reason:** Typically high in caffeine, sugar, and other stimulants not appropriate for children's daily intake.
  - **Alternatives:** Water, electrolyte solutions specified by health professionals.

- **Caffeinated Beverages**
  - **Examples:** Hot/iced coffee, strong teas and Karak teas.
  - **Reason:** Excessive caffeine can impact blood pressure, sleep, and concentration in children.
  - **Alternatives:** Herbal teas without caffeine, warm milk (complying with banned additives).

- **Fruit Syrup Juices**
  - **Example:** Juice that contain the statement "Made from real fruit juice" or "beverage, cocktail, drink".
  - **Reason:** Syrup-based juices are essentially sugar-loaded drinks lacking the fiber/vitamins of real fruit.
  - **Alternatives:** 100% fruit juice (max 200 ml) without added sugar, artificial flavoring and/or coloring. It can be diluted with water or carbonated water. freshly blended smoothies without added sugar can be made with low fat dairy. Refer to section 12.5.2 for more details on juice specifications.

11.2.4.3 Processed and High-Fat Meats

- **All non halal meat options**
  - **Examples:** Food items containing pork derivatives or with added alcohol (ethanol) or one of its products.
- **Processed Meats**
  - **Examples**: Hotdogs, sausages, mortadella, pepperoni, salami, smoked turkey, smoked salmon, bacon and other Deli meats options.
  - **Reason**: High sodium, preservatives, and saturated fats; linked to long-term health risks.
  - **Alternatives**: Lean poultry, fish, or unprocessed meats (baked or grilled).
- **High-Fat Meat Products**
  - **Examples:** all high fat meat cuts coming from beef, lamb and camel
  - **Reason**: Encourages the use of leaner cuts, reducing risk of cardiovascular issues and obesity.
  - **Alternatives**: chicken breast, trimmed beef, or plant-based proteins (legumes).

11.2.4.4 Additive-Containing Foods

- **Food with Synthetic Colorings and flavors**
  - **Examples**: Sunset yellow E110, Quinoline yellow E104, Carmoisine E122, Allura red E129, Tartrazine E102, Ponceau 4R E124, RED40, YELLOW5, YELLOW6, BLUE1 and Food containing artificial sweetener, preservatives, colors or flavors manufactured from chemicals.
  - **Reason**: Chemical dyes or chemical food flavoring can cause hyperactivity or allergic reactions in sensitive individuals.
  - **Alternatives**: Natural colorings from vegetable juices (beetroot, carrot, turmeric), or fresh fruits.

- **Monosodium Glutamate (MSG) & Flavor Enhancers**
  - **Reason**: Can cause headaches or allergic-like reactions in sensitive children; encourages over-consumption of high-sodium foods.
  - **Alternatives**: Use fresh herbs, spices, onion, garlic, or citrus for flavor enhancement.

- **High Fructose Corn Syrup**
  - **Reason**: HFCS correlates strongly with obesity and metabolic issues.
  - **Alternatives**: Use minimal sugar, honey, or fruit purees for sweetness; still in moderation.

- **Artificial Sweeteners:**
  - **Examples:** all sweeteners that are not listed under the UAE technical regulation UAE.S 192:2019 Additives
  - **Reason:** some artificial sweeteners that are not listed under UAE technical regulations are possibly carcinogenic to humans.
  - **Alternatives**: Sweeteners as listed in the UAE technical regulation UAE.S 192:2019 Additives Permitted for Use in Food Stuffs. An example of an acceptable sweetener is stevia (made from the leaves of the Stevia rebaudiana plant)

11.2.4.5 Dairy and Soy Products

- **Dairy Drinks**
  - **Examples:** Flavored and sweetened dairy products and those that exceed set sugar/fat thresholds.
  - **Reason**: Excess saturated fat, and sugar can overshadow nutritional benefits of milk.
  - **Alternatives**: Unflavored full fat or low-fat milk, unsweetened yogurt, and natural cheese.

- **Soy Products**
  - **Examples:** Soy milk, and sauces that contain soy and its derivatives.
  - **Reason:** Many soy products contain flavor enhancers, sweeteners, or other chemicals.
  - **Alternatives:** Other plant-based milks (coconut, almond or oat).

- **Cheese Imitations**
  - **Example**: Imitation cream cheese, sandwich slices, flavored cheese slices and other highly processed imitation cheese products
  - **Reason**: Overly processed cheese spreads/imitations can be high in trans fats, salt, and additives.
  - **Alternatives**: Low-fat mozzarella, reduced-fat cheddar, other low-fat dairy options.

11.2.4.6 Other Restricted Items

- **Pickled Vegetables (High Salt/Preservatives)**
- **Reason**: Excess salt and preservatives clash with low-sodium requirements.
- **Alternatives**: Fresh or lightly marinated vegetables using vinegar/herbs with minimal salt.

- **High caloric spreads, salad dressing and sauces**
- **Examples:** Mayonnaise, liquid and dried chili, ketchup. ready sauces such as ranch sauce, jalapeno sauce, Italian sauce and others.
- **Reason**: High sugar, salt, or fat sauces with artificial flavoring or/and coloring.
- **Alternatives**: Low-sodium, low-fat homemade sauces (tomato-based with herbs, yogurt-based dressings). low fat mayonnaise, low-salt and sugar ketchup.

- **Allergens: Nuts, Soybean, Sesame**
  - **Examples:** All nuts and their products, peanuts and their products, soybean and its products, and sesame seeds and its products.
  - **Reason:** allergen concerns.
  - **Alternatives**: seeds, chia seed, flax seed and other unsalted seeds options

11.3 Nutritional Requirements for Meals

11.3.1 Daily Nutritional Goals: Macronutrient & Micronutrient Distribution

Nutritional needs can be defined as the minimum amount of nutrients and energy that the human body needs for growth. Providing the nutritional needs of students in educational institutions is necessary supporting students' growth and health, and preventing diseases caused by a lack of one or more of the necessary nutrients in the students' food intake. Refer to table 4: Daily Nutritional goals below for more details on student's daily macronutrients and micronutrients needs.

Table 4 Daily Nutritional Goals

MACRONUTRIENTS, MINERALS & VITAMINS[1]	KG & Elementary	Middle school	High school
Calories	1200-1400	1600-1800	1800-2200
Macronutrients			
Protein (%Kcal)	10-30	10-30	10-35
Protein (g)	19	34	46-56
Carbohydrates (%Kcal)	45-65	45-65	45-65
Carbohydrates (g)	130	130	130
Fiber (g)	17-20	22-25	25-35
Added Sugars (% kcal)	<10	<10	<10
Total Fat (%Kcal)	25-35	25-35	25-35
Saturated Fatty Acids (%Kcal)	<10	<10	<10
Minerals			

[1] https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf

Calcium (mg)	1000	1300	1300
Iron (mg)	8-10	8-11	8-15
Sodium (mg)	1,500-1800	1,800-2300	2,300
Vitamins			
Vitamin A (mcg RAE)	400	600	700-900
Vitamin D (IU)	600	600	600

11.3.2 Meal Provision Requirements

- Encouraging provision and diversification of fruits, of at least three types, (either whole or cut) at breakfast and lunch meals.
- Providing at least one type of vegetable salad per day.
- A variety of vegetables should be available daily for lunch, in addition to providing at least one type of boiled, baked or grilled vegetables.
- When preparing food, skinless chicken and fat-free meat should be used if they are used for lunch.
- The sandwiches should be from the daily production in the morning before serving, and it is not allowable to serve sandwiches that are prepared earlier.
- Include 1 or more wholegrain choice every day. It must be made of 70% flour, number 1,25% flour, number 2, 5% bran flour, free from impurities.
- The supplier is committed to preparing and serving meals meeting all nutritional standards. Also, expiry and production dates and the company name of the food product must be provided.
- The food should be of a palatable taste, acceptable to students, and served in an attractive manner.
- The supplied product should contain a nutritional fact label as per UAE.S GSO 2233:2021 specification – Requirements for Nutrition Labelling.
- Recognizing that no single food item contains all the essential nutrients needed by the body, suppliers must diversify diets to ensure the availability of essential nutrients. A balanced diet, comprising sufficient quantities of nutrients from different food groups, is essential. This applies specifically to sandwiches, meals, and salads prepared in the cafeteria of schools or those supplied to them.

11.3.3 Strategies to Increase Nutrient Intake

Research shows that some students in the UAE do not get enough iron, vitamin D and calcium in their diets to support their rapid growth. Here are some ways to increase their intake of these important minerals and

vitamins. For insights into common nutrient deficiencies in students and strategies to enhance nutrient availability in food, refer to **table 5: Strategies to Increase Key Nutrient Intake** that provide some strategies to increase common Nutrient Deficiencies in Students, also refer to **appendix 3** for common sources of iron, vitamin D, and calcium in each food group.

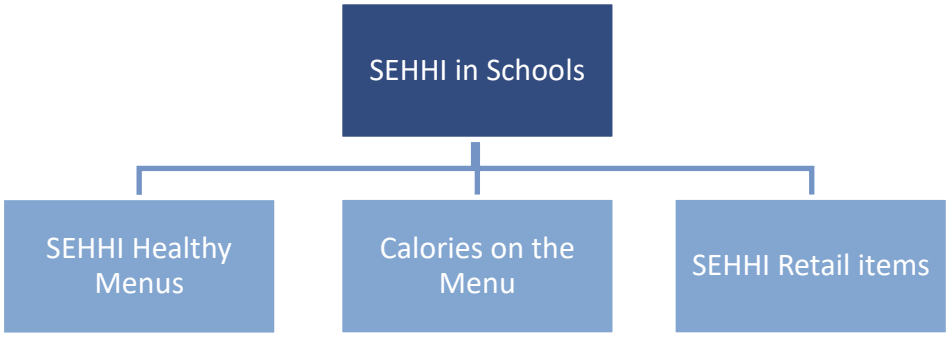
Table 5: strategies to increase key nutrients intake

Nutrient	Practical Strategies
Iron	• Include lean red meat (in moderation), legumes (lentils, chickpeas), and fortified cereals • Serve Vitamin C-rich foods (citrus, tomatoes) alongside iron sources to enhance absorption.
Calcium	• Incorporate low-fat dairy (milk, cheese, yogurt) or fortified alternatives (soy, almond) in meals • Offer calcium-fortified juices if relevant, though watch added sugar.
Vitamin D	• Encourage safe sun exposure during supervised outdoor activities • Serve Vitamin D-fortified dairy or plant-based beverages • Include oily fish (e.g., salmon, tuna) if feasible.
Fiber	• Replace refined grains with whole grains (brown rice, whole wheat bread) • Offer fruit snacks or raw vegetables (carrot sticks, cucumber) instead of processed snacks.
Protein	• Provide legume-based dishes (lentil soup) refer to **appendix 6 of plant-based protein sources**, lean meats, eggs.
Healthy Fats	• Incorporate avocados, unsalted nuts, and olive oil in meal prep • Limit usage of saturated fats (butter) and avoid trans fats wherever possible.

11.3.4 SEHHI Program Specifications

SEHHI in schools is a program for all food suppliers and food establishments, where they are required to apply SEHHI standards for food and beverages that facilitate the access and consumption of healthy food for students. Refer to **appendix 5** on how to add SEHHI logo to approved menu and items.

Graph 1: SEHHI main themes



11.3.4.1 SEHHI healthy Menu & Meals Specifications

Nutrition specifications per serving vary significantly across different age groups to ensure that children receive the appropriate nutrients for their developmental stage and activity level. Servings are designed to support growth and development, emphasizing essential vitamins and minerals. **Table 6** below shows nutrition specifications to guide balanced diets tailored to each school cycle. All meals on the school menu must meet these specifications.

Table 6: Food labelled with the SEHHI Logo shall comply with the following specifications where applicable

Student need for basic nutrients for breakfast and school lunch by school age						
Food ingredients	**Breakfast**			**Lunch**		
	KG & Primary (4–9 yrs)	**Middle School** (10–12 yrs)	**Secondary & High School** (13–18 yrs)	**KG & Primary** (4–9 yrs)	**Middle School** (10–12 yrs)	**Secondary & High School** (13–18 yrs)
Calories	350-500	400-550	450-600	550-650	600-700	750-850 [2]
Salt	≤ 0.8 g salt per 100 g of product or ≤ 0.32 g of sodium per 100 g of product. In total, the dish should not exceed ≤ 2.4 g salt per portion or 0.96 g of sodium per portion					
Total fats	≤ 3.5 g of fat per 100 g of product excluding natural fat contributed by fish (lean or fatty), lean chicken, lean red meat, eggs, avocadoes, , legumes, and seeds. A dish should contain no more than 19.5 g/label serving size					
Saturated fats	≤ 1.5 g of fat per 100 g of product excluding natural fat contributed by fish (lean or fatty), lean chicken, lean red meat, eggs, avocadoes, legumes, and seeds. A dish should contain no more than 6 g/label serving size					
Trans fat	≤ 1 % from naturally occurring TFAs (Maximum 2 g TFAs per 100 g of oils used in food labelled with the SEHHI logo					
Sugar	≤ 2 g sugars per 100 g of product. In total ≤ 9 g of added sugar per portion					

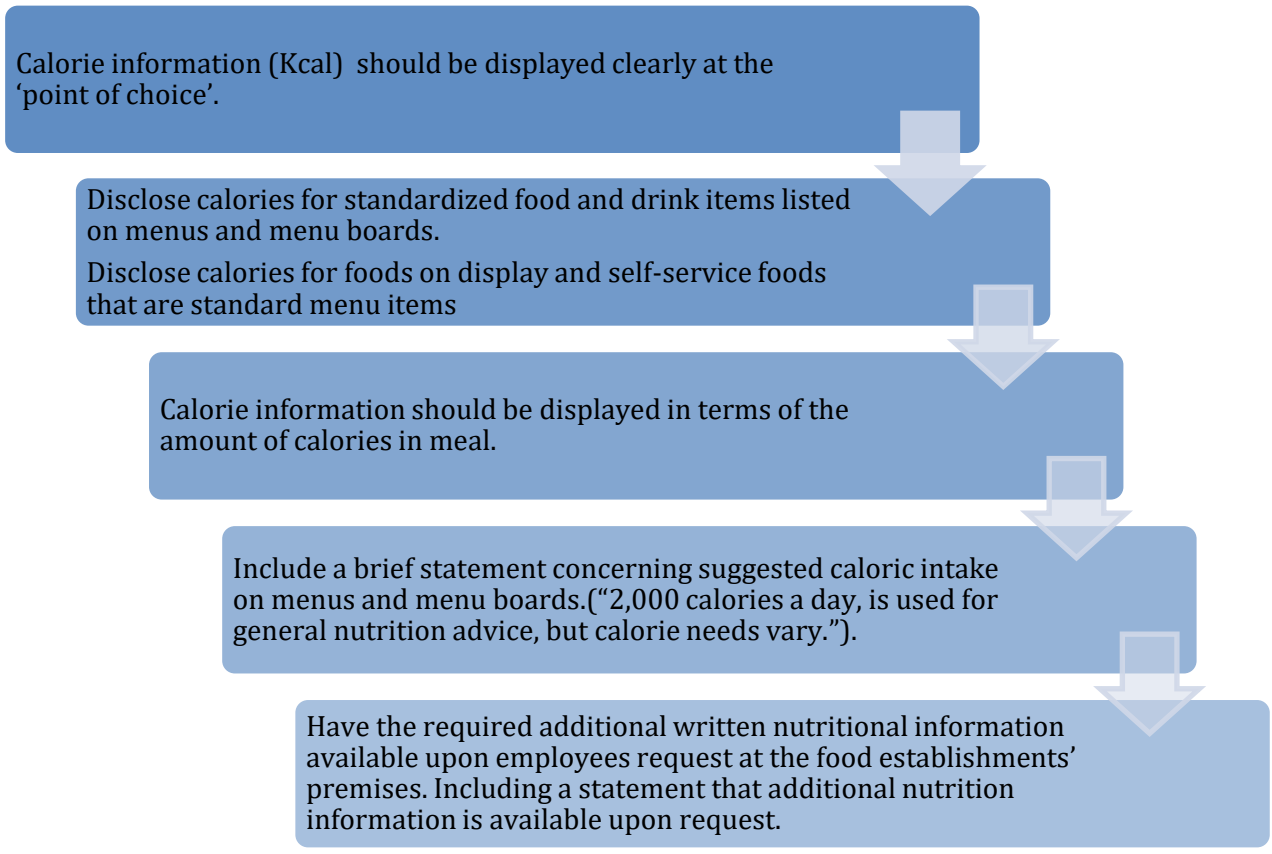
In schools, it is crucial to classify food and beverage items and their ingredients. These items can be categorized as either healthy options suitable for serving or as unhealthy options that are prohibited. Food suppliers can utilize nutrition facts tables or food labels on packaged items to achieve this classification. For guidance on reading nutrition facts tables, refer to **Appendix 2: Reading Nutrition Facts Label.**

[2] https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf

11.3.4.2 Calories on Menus

For transparency on the caloric information for food and drinks provided in schools. Food suppliers need to implement the 5 calories on the menu requirements as listed in **chart 2: Calories on the menu requirements** below**.**

Chart 2: Calories on the menu requirements

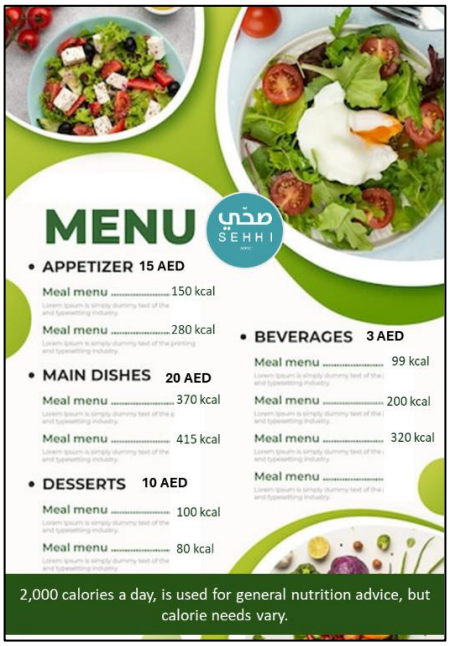


Calories for standard food and beverage items listed in the school menu must be displayed:

- Adjacent to the name or price of the standard food item. In a way that is unobstructed and readily legible to customers.
- At least in the same format and font size as the name or price of the standard food item. If fonts in the price vary in size, then calories must be at least the same size as the largest font size in the price.
- **To distinguish the calorie information from other numbers on the menu or displaying tag:**
    - The term ''Calories'' or ''kcal" must appear adjacent to the number of calories for each standard menu item.

- The term “Calories” or “kcal” must be displayed in the same size, font and prominence as the calorie number.

- Refer to the image below to see an example of how calories are displayed in a menu.



11.4 Nutritional requirements for Snacks

There are some nutritional requirements for snacks to be considered healthy, and they are allowed to be served by food suppliers. These requirements apply to the following snacks: any food and drink sold to students by food suppliers during the school day other than food provided as part of the school meal program. This includes foods that are served, such as snacks, self-service and ready-to-eat foods sold in the school cafeteria, and foods sold in vending machines.

11.4.1 Packaged Snacks Requirements

Packaged snacks are the ones that fulfill the following:

- To be a grain product containing 50% or more whole grains by weight (containing whole grains as the first ingredient); or
- Have a fruit, vegetables, a dairy product, or protein food as the first ingredient; or
- To be a combination food containing at least half a cup of fruit and/or vegetables. Moreover, the packaged snack must meet the following nutrient criteria for calories, sodium, sugar and fat listed in **table 7: Nutrient per serving specifications for packed snacks served in schools** below:

Table 7: Nutrient per serving specifications for packed snacks served in schools

Nutrition Specifications / serving	
Nutrients	Packaged Snack
Calories	200 calories or less
Sodium	200- 350 mg or less
Total fats	35% of calories or less
Saturated fats	Less than 10% of calories
Trans fat	No more than 1g
Sugar	Up to 35% of total carbohydrates from sugar by weight including naturally occurring and added sugar 35% of calories or less (3 grams)

11.4.1.1 Exemptions Criteria for healthy snacks

Some snacks may exceed the nutrition requirements per serving, however considering that they provide nutritious healthy snacks, then they are exempted from some of the nutrition specifications per serving as shown in **Table 8** below.

Table 8: Exemption criteria for healthy snacks below

Snacks that are excluded from food specifications	
Food	Excluded food standards
• **Fresh and frozen fruits and vegetables, with no added ingredients.** • **Canned fruits packed in 100% juice or concentrated light syrup, with no added ingredients except water.** • **Canned vegetables (no added salt/low sodium), no added fat.**	Excluded from all nutritional standards (for nutrients).
• **Low-fat cheese (including partially skimmed mozzarella).** • **Seed or seed butter: Ex; sunflower seeds and pumpkin seeds.** • **Apple with low fat cheese.** • **Unsweetened celery and raisins.** • **Whole eggs without added fat.**	It excludes the total fat and the saturated fat standards but must meet all other nutrients.
• **Lean seafood (such as tuna canned in water.**	The standard for total fat is excluded, however it must meet other essential elements of the nutritional standards.
• **To add a palatable taste to school foods, you can use dried fruits without added sugars such as dried cranberries, cranberries, blueberries, dates, figs, prunes.**	Sugar is excluded from the standard however it must meet other essential nutrients of the nutritional standards.
• **Mixture of dried fruits without added sugars or fats.**	Total fat, saturated fat and sugar are excluded from the standard; however the other nutritional contents must meet the standards.

11.4.2 Bakery Items: Recommended maximum sizes of allowed bakery goods

The recommended maximum serving sizes for bakery items listed in **Tabel 9: Maximum serving size of different bakery items** served in schools are designed to ensure that students receive balanced nutrition while enjoying their meals. These guidelines help control portion sizes to prevent excessive calorie intake and promote healthier eating habits. By adhering to these standards, schools can provide students with appropriate portions that align with SEHHI recommendations for portion control. Additionally, **the SEHHI logo cannot be added to bakery goods.**

Table 9: Maximum serving size of different bakery items

Maximum serving size (gram)	Types Of Baked Goods	
≤ 40		Biscuits, muesli, pancakes
≤ 80		Granola slices or bars
≤ 60		Hidden vegetables and fruits Muffin (pumpkin muffin, carrot muffin…etc) Small loaves
≤ 65		Pastries such as fatayer, chicken fatayer, cheese fatayer etc.
≤ 100		Manakish

≤ 30 From crackers 2-3		Crackers or savory crackers, breadsticks (served with fruit, vegetables or dairy products); Serving size does not include fruit
≤ 55		Mini vegetable pizza pastry
≤ 125[3]		Quiche or Pie (fruit pie, egg pie …etc)
Note that the serving sizes listed above are the maximum recommended sizes		

11.4.3 Healthy Vending Machines

For a vending machine to be considered a healthy one, the following criteria must be met:

Image: Examples of healthy options in the vending machine

[3] https://www.fda.gov/media/102587/download

When selecting packaged snacks for vending machines:

- They must comply 100% with the packaged food criteria mentioned in section (11.4.1)
- A Nutrition Facts label of the food items should be analyzed to ensure that the product meets the standards.
- Items displayed depend on the type of vending machine (e.g. refrigerated/non-refrigerated), so the items must match the vending machine used in educational institutes
- Food options should be clearly placed in the vending machine and have single portion meal options.
- Please refer to table **10** below for an some ideas of approved SEHHI items to be displayed in healthy vending machines.

Table 10: SEHHI options that can be served In SEHHI vending machines

Beverages	**Packaged Snacks**
• Regular or carbonated water (any size). • Full fat or low-fat milk (240ml) or yogurt with no additives or Flavors and milk substitutes (such as coconut milk). • Natural juice such as vegetable juice or 100% fruit juice (200 ml) • Water flavoured with natural essence with no added sugar	• Canned fruits packed in 100% juice or light syrup, with no added ingredients, except water. • Canned vegetables (no added salt/low sodium), no added fat. • Fresh vegetables and fruits without added fats, sugar or salt. • Canned fruit packed in water. • Three pieces of date. • Dried fruits or 100% dried fruits bars. • Low fat yogurt with fresh fruits, no added sugar. • Low-fat cheese like cheese strings. • Whole-grain crackers (100% whole-grain bars (such as granola bars), crackers, and rice cakes). • Natural or unflavoured popcorn provided • Whole grain pancakes. • Sandwiches. • Baked chips.

11.4.4 Mixed Snacks

- A prepared snack is defined as the dish that contains a mixture of:

- Meat/meat substitutes + whole grain food.
- Vegetables + meat / meat substitutes.
- Fruit + meat / meat substitutes.
- Meat/meat substitutes only, excluding processed meat snacks (e.g., mortadella), yoghurt, low-fat or low-fat cheese and seeds.

- Prepared snacks must meet the following criteria listed in **table 11: Nutrient per serving specifications for mixed snacks** below.

Table 11: Nutrient per serving specifications for mixed snacks

Nutrition Specifications/Servings	
Nutrients	Mixed food snack
Calories	350 calories or less
Sodium	480 mg or less
Total fats	35% of calories or less
Saturated fat	Less than 10% of calories
Trans fat	No more than 1 g
Sugar	35% of calories or less (3 grams)

11.5 Hydration and Beverage Requirements

Proper hydration supports students' physical health, cognitive performance, and overall well-being. Schools play a critical role in promoting healthy beverage habits by ensuring access to safe water, limiting sugary drinks, and reinforcing healthy hydration behaviors throughout the day (WHO, 2021; FAO, 2022).

11.5.1 Access to Drinking Water

- Schools must ensure that free, safe, potable drinking water is always accessible to students (WHO, 2021).
- Water stations should be installed and maintained in the following key areas:
- Classrooms
- Dining areas and canteens
- Sports and physical activity zones
- Drinking water should be available for students with every meal and during all school-based activities, including outdoor events and physical education classes.

11.5.2 Approved Beverages

- The following beverages are allowed on school premises (WHO, 2021; UNICEF, 2020):
  1. Plain drinking water (primary hydration source)
  2. Full fat and Low-fat plain milk, appropriate for age and dietary needs
  3. 100% natural fruit or vegetable juice, with no added sugar or additives, limited to a 200 ml serving per day. For more details refer to table 12 for juice specifications below on accepted juice types in schools:

Table 12: Juice specifications

Full-Strength Fruit or Vegetable Juice	Undiluted product obtained by extraction from sound fruit. It may be fresh, canned, frozen, or reconstituted from concentrate and may be served in either liquid or frozen state or as an ingredient in a recipe. Examples of full-strength fruit and vegetable juice are apple (including cider), grape, grapefruit, grapefruit-orange, lemon, lime, orange, pear-apple, pineapple, prune, tomato, tangerine, and vegetable. The name of the full strength fruit or vegetable juice as it appears on the label must declare "100 percent juice." Specifications: Juice must be pasteurized full-strength 100 percent fruit juice, vegetable juice, or a combination of fruit and vegetable juices. The name of the full-strength fruit juice on the label must include one of the following terms: “juice,” “full-strength juice,” “100 percent juice,”. The statements “natural” and “organic” do not indicate that a juice is full strength.
Diluted Juice	Specifications: The name of the product as it appears on the label must contain words such as "juice drink" or "diluted juice beverage" and must indicate the percent full-strength juice in the product. The label ingredient statement must list "juice”, “full-strength juice," "single¬ strength juice," "reconstituted juice," "juice from concentrate," or "juice concentrate.
Juice Drink	A product resembling juice which contains full-strength juice along with added water and possibly other ingredients such as sweeteners, spices, or flavorings. A juice drink may be canned, frozen or reconstituted as from a frozen state or a drink base or as an ingredient in a recipe. Examples of juice drinks are apple juice drink, grape juice drink, orange juice drink, and pineapple-grapefruit drink.

11.5.3 Promoting Healthy Hydration

- Healthy hydration habits should be encouraged through visual cues, and school staff reinforcement through the following: (UNICEF, 2020; WHO, 2021).
  1. Display hydration reminder posters near water stations, classrooms, and canteens (e.g., 'Water First for Thirst').
  2. School staff should incorporate water breaks into the school day, especially before, during, and after physical activity.
- Water should be the default beverage served during school meals and special events.

11.6 Food Preparation and Ingredient Standards

11.6.1 Healthy Cooking Methods

Food suppliers must prepare food using baking, roasting, steaming, poaching, grilling, and light sauteing with no deep frying or pan frying with excess oil. Below are some examples of how to prepare food using these cooking methods.

- **Baking / Roasting:**
  - **Roasted Vegetables:** Carrots, sweet potatoes, zucchini—lightly seasoned with herbs and a dash of olive oil. The natural sweetness appeals to younger palates.
  - **Oven-Baked "Fries":** Cut potatoes or sweet potatoes into strips, drizzle with minimal oil, and bake to achieve crispness without frying.
  - **Baked Chicken Tenders:** Lightly coat lean chicken in whole-grain breadcrumbs, season with herbs or mild spices, and bake for a crunchy texture that mimics fried tenders.
- **Steaming / Poaching:**
  - **Steamed Fish Fillets:** Season lightly with lemon, garlic, or mild spices—particularly good for variety and easy digestion.
  - **Veggie Buns:** Use whole-wheat flour for the bun, stuff with seasoned vegetables or lean poultry; popular for its soft texture and mild flavor.
- **Grilling / Light Sautéing:**
  - **Grilled Sandwiches:** Whole-grain bread, lean protein (e.g., grilled chicken), low-fat cheese or cheese alternatives, minimal oil—great for a crispy, satisfying sandwich.
  - **Stir-Fry Vegetables & Protein:** Quick, high-heat method with minimal oil, showcasing colorful veggies. Use herbs and low-sodium sauces for flavor.

11.6.2 Local Ingredients and food Sourcing

- Aim for at least 30% local sourcing.
- Showcase local fruits (dates, melons) and vegetables (tomatoes, cucumbers) for better flavor, and cultural relevance.
- Feature them in salads, wraps, or as side dishes.

11.7 Special Dietary Needs and Accommodations

Schools must offer inclusive, nutritious meals that reflect the diverse dietary needs of students. This includes providing vegetarian, vegan, and culturally relevant options; ensuring allergen-free alternatives are available for each school cycle; engaging students in menu planning; and clearly labeling ingredients and potential allergens for safe, informed choices (FAO, 2022; UNICEF, 2020; WHO, 2021).

11.7.1 Respecting Religious, Cultural, and Ethical Dietary Needs

11.7.1.1 Halal Compliance

- **Halal Compliance as Default Standard:** All items constituting the supplied meals, and prepared meals served in schools must be Halal, in accordance with UAE law and must be free from materials that violate Sharia' (Islamic law), and fulfill the requirements contained in the UAE Standard No. UAE.S GSO2055-1, Halal Food - Part One: Halal Food General Requirements.

11.7.1.2 Other Preferences

- **Provision for Other Preferences:** Schools and food suppliers should accommodate requests for vegetarian, vegan, or other ethical and religious preferences when communicated by families (UNICEF, 2020).
- **Menu Labelling:** All menus, canteen signage, and food packaging should clearly indicate whether an item is vegetarian, vegan, or meets other dietary classifications (WHO, 2021).
- **Family Communication:** Schools must maintain open dialogue with parents and guardians to tailor offerings and ensure meal inclusivity (UNICEF, 2020).

11.7.2 Allergies and Intolerances

11.7.2.1 School Responsibilities

- **Staff Training:** Ensuring school staff participate in regular training sessions by relevant authorities for all school staff, including kitchen personnel, on allergen identification, prevention, and emergency response (FAO, 2022).
- **Student & Parent Awareness:** Schools should distribute educational materials shared by relevant authorities about food allergies and intolerances, highlighting safe eating practices (WHO, 2021).
- **Inclusive Support:** Offer safe alternative food choices and ensure a secure dining environment for at-risk students.
- **Documentation & Allergy Register:** Maintain a comprehensive record of students with allergies, including severity and emergency procedures.
- **Information Display:** Prominently display allergy-related materials in classrooms, canteens, and staff areas.
- **Communication:** Maintain regular updates and open communication with families regarding any food-related health needs or updates.

11.7.2.2 Vendor Responsibilities

- **Collaborative Menu Planning:** Work with certified nutritionists to plan meals inclusive of students with food allergies and intolerances.
- **Safe Alternatives:** Provide allergen-free alternatives that are clearly labeled and nutritionally equivalent (UNICEF, 2020).
- **Ingredient Labelling:** Ensure all supplied items contain full ingredient lists including allergens labelling (FAO, 2022).
- **Preventing Cross-Contamination:** Use separate utensils, prep spaces, and storage for allergen-free items. Train all handlers in allergen safety protocols (WHO, 2021).

11.7.3 Athletes and Physically Active Students

- Parents should consult with healthcare providers and nutritionists to accommodate special dietary needs for physically active students when needed.
- Reinforce proper hydration guidelines, especially on training or competition days, ensuring free access to water and, where necessary, approved electrolyte replacements or isotonic drinks with the consultations of the school nurse.
- **Electrolyte replacements or isotonic drinks conditions of use:**
  - Permitted only for middle and high school students engaged in prolonged, high-intensity physical activity (e.g., athletic training or competitions lasting more than 60–90 minutes).
  - Not permitted for general consumption, classroom settings, mealtimes, or casual daily hydration (Canadian Pediatric Society, 2017; Australian Government, 2020).
  - Must be provided in controlled settings by qualified personnel, such as PE teachers, coaches, or school health staff/nurse.
  - Not to be self-served or sold independently by students (USDA, 2025).
  - Nutritional Compliance: Beverages must be free of added sugar, artificial coloring, and caffeine.
- **Educational Support:** Schools need to ensure that students, parents, and staff must be informed on the specific use cases and limitations of electrolyte drinks, and that isotonic drinks should not displace water or be perceived as equivalent in regular contexts.

11.8 Guidelines for Home-Packed Lunchboxes

Packed lunches brought from home play an important role in supporting students' daily nutrition and should align with the school's nutrition requirements. By promoting consistency between home and school food environments, schools can help foster lifelong healthy eating habits among students.

11.8.1 Expectations and Approved Contents

- Packed meals should reflect national school nutrition requirements and be suitable for the student's age and developmental stage (UNICEF, 2020; WHO, 2021).
- Lunchboxes should include:
  1. **Fresh fruits and vegetables:** Include two portions of vegetables (example: cucumber, carrot sticks, 2 ½ cups salad), and one portion of fruit (example: apple, banana, 10-grapes or strawberries or one tablespoon of raisins).
  2. **Whole-grain bread, rice, or pasta**. Include one starchy food (example: bread, toast, pasta, roll, wrap, or bagel).
  3. **Lean proteins** (e.g., eggs, legumes, grilled chicken): Include one portion of protein (example: meat, fish, chicken, eggs or non-dairy vegetarian sources such as beans, lentils).
  4. **Healthy snacks** (e.g., low-fat cheese, air-pooped popcorn)
  5. **Water, plain milk, or other approved beverages:** Include a dairy product (example: milk, cheese, yoghurt), and include fluid (example: water, low fat milk, and >200ml unsweetened 100% fresh fruit juice)
- Meals should be stored in clean, temperature-safe containers and provided in appropriate portions (FAO, 2022). Refer to my plate appendix.

11.8.2 Prohibited Items

- All items listed in section (11.3.6) are not permitted in packed lunches as per global and local guidelines.

11.8.3 Monitoring and Guidance

- School staff assigned to health and nutrition oversight should conduct respectful visual inspections of lunchboxes, avoiding judgment or embarrassment (WHO, 2021; Finnish National Agency for Education, 2019).
- Monitoring should be randomized and non-invasive, used to observe broad patterns and intervening sensitively when needed.
- Non-compliant items should be substituted with healthier canteen-approved alternatives, and parents should be notified with supportive communication (UNICEF, 2020).
- In the case of repeated violations, the school needs to further engage with parents through school counselors or health teams (FAO, 2022).

11.8.4 Communication with Parents

- Parents should receive a lunchbox nutrition guide from schools at the beginning of the academic year (WHO, 2021).
- Schools should organize at least one nutrition education session per term with a focus on lunchbox planning (UNICEF, 2020).
- Communication with parents must be clear, non-blaming, and responsive to cultural and individual dietary needs.
- Staff should follow up with families on any consistent concerns about lunch content and nutritional adequacy.

11.8.5 Reinforcement Strategies

- Use positive reinforcement strategies such as recognition boards, healthy lunchbox certificates, or student-of-the-week features (WHO, 2021)
- Encourage healthy lunchbox theme days and lunchbox challenges to foster healthy habits and student engagement.
- Promote peer-to-peer messaging through student councils and clubs that support healthy eating.

11.9 Creating a Supportive School Food Environment

A supportive school food environment helps students build lifelong healthy habits by shaping what they see, do, and experience around food. This section outlines how schools and food providers can create environments that consistently promote healthy choices and positive attitudes toward food.

11.9.1 Visual Nudges and Messaging

11.9.1.1 School Actions

- Display colorful, student-friendly posters near food areas to promote healthy eating messages (World Health Organization, 2021).
- Use signs or prompts like “Try something green today!” or “Color your plate!” near dining areas to encourage variety (World Health Organization, 2021).
- Highlight locally grown or seasonal ingredients with labels or flags to build awareness and excitement.
- Train staff to gently prompt students at the point of service (e.g., “Would you like to add fruit today?”) (World Health Organization, 2021).
- Reinforce healthy defaults in school-hosted events or activities (e.g., serving water or vegetables by default).

11.9.1.2 Supplier Actions

- Place the most nutrient-dense items (e.g., vegetables, legumes, water) at eye level or first in line to guide choice (World Health Organization, 2021).
- Rotate under-consuming healthy items into more visible areas to balance selection.
- Serve fruits and vegetables pre-sliced or in child-friendly formats for easier consumption (World Health Organization, 2021).
- Use appealing plating and containers (e.g., clear containers, colorful trays) to enhance visual presentation.
- Add icons or visual tags (smileys, heart symbols stickers) next to certain foods to increase student attention (World Health Organization, 2021).
- Ensure healthy options are provided by default (e.g., water instead of juice, vegetable sides included in meals) (World Health Organization, 2021).
- Use themed names for menu items on school communication materials (e.g., “Power Peas” on menus or newsletters) (World Health Organization, 2021).

11.9.2 Mealtime Practices for Schools

- **Promote Mindful and Respectful Eating Habits**
  - Introduce simple mindful eating practices—such as encouraging students to notice the colors, textures, and smells of their food (Robinson et al., 2013).
  - Guide food conversations in class that focus on flavor and benefits rather than labeling foods as “good” or “bad”.
  - Set up calm and respectful dining environments where students can enjoy meals without pressure or distraction.
  - Ensure consistent messaging about nutrition across staff, posters, and activities (Centers for Disease Control and Prevention, 2019).

- **Model Healthy Eating Behaviors:**
  - Have teachers and staff eat alongside students during mealtimes to model healthy behaviors (Pellikka et al., 2019).
  - **Supervise and guide students:** Provide adult supervision during meals to model good eating behaviors and promptly address any dietary concerns.

- **Creating a Conducive Mealtime Environment**
  - Keep dining areas clean, safe, and inviting. A calm, social atmosphere promotes healthier and more mindful eating.
  - Create dining environments that encourage social interaction, reduce stress, and reinforce positive associations with healthy foods.

- **Establish Structured Meal Schedules**
  - **Set regular meal schedules:** Establish consistent times for meals and snacks, reinforcing structured habitual eating patterns, and emphasize breakfast.

- **Use Positive and Supportive Language:**
  - School teachers and staff need to consistently use positive, supportive language about food and health, emphasizing well-being rather than appearance (QCC, 2024).
  - Avoid terms that may negatively influence students' body image or perceptions of food (e.g., using words like "fat," "skinny," or "junk") (CDC, n.d.; QCC, 2024).
  - Foster open and safe classroom environments where students feel comfortable discussing food, health, and body image openly (QCC, 2024).
  - Actively involve parents and caregivers to reinforce consistent, supportive nutrition and body image messages at home (QCC, 2024).

11.9.3 Healthy Celebrations & Events

Schools should ensure that all school celebrations, events, activities, and any other occasions happening on school premises create a healthy, positive food environment for all students, with consistent messages about healthy eating. This includes events where food is provided or sold, such as curriculum-based activities, sporting days, national celebrations, school breakfast/lunch programs, fundraisers, and classroom activities.

11.9.3.1 School Actions

- Ensure all meals and snacks served during events are nutrient-dense and aligned with the school's healthy eating requirements.
- Confirm that food providers clearly label items containing allergens or intolerances and provide safe alternatives for all students to participate.
- Use non-food-based rewards such as school-wide recognition (e.g., announcements, noticeboards, letters to guardians) or tangible items (e.g., stationery, games, sports equipment).
- Create a fun, festive atmosphere with healthy snacks and refreshments that match engaging themes or educational goals.
- Inform and guide parents about the school's nutrition guidelines and encourage them to contribute healthy items for classroom events.
- Maintain open communication with families regarding student dietary needs, restrictions, and preferences.
- Share tips and reminders with families to help maintain consistent healthy food messaging across school and home.

- Ask parents and caregivers to refrain from sending or bringing food or beverages that do not align with the school's nutrition requirements.
- Integrate nutrition education into celebrations by engaging students in discussions about food choices and involving them in preparing or selecting healthy options.
- Respect cultural and dietary diversity by offering a variety of healthy food choices that are inclusive of different backgrounds.

11.9.3.2 Supplier Actions

- Ensure all food and beverages supplied during school events comply with the dietary requirements and specifications in section 12.4 and section 12.2.4, prioritizing the green food group and avoiding items from the red food group list.
- Ensure all bakery items offered follow the acceptable reduced portion size mentioned in section 12.4.2 table 9.
- Proactively and creatively develop healthy food offerings that are visually appealing and enjoyable for students during special events to promote a healthier dietary culture.

11.9.4 Marketing and Advertisement Rules

Schools and food suppliers should create a consistent food message by limiting students' exposure to non-nutritious food marketing while actively promoting healthy choices.

11.9.4.1 School Role

- Avoid logos, branding, or advertisements for foods and beverages that do not meet the school nutrition requirements on any school property, including entrances, canteens, materials, and school-sponsored events.
- Limit children's exposure to all forms of unhealthy food and beverage marketing (Abu Dhabi Quality and Conformity Council [ADQCC], 2024).
- Prohibit the display, sale, or advertisement of fast-food items in school tuck shops, vending machines, or surrounding premises (ADQCC, 2024).
- Promote healthy food options through student-facing materials such as menu boards, lunch line signage, digital newsletters, and morning announcements (Centers for Disease Control and Prevention, 2019).
- Marketing restrictions should also protect children from related techniques that may be used to influence food and beverage purchasing, including sports sponsorships, promotions and deals, and gifts, toys and prizes.
- Restrict marketing all brands that supply unhealthy food as sponsorship. Find appropriate sponsorship from a wide range of commercial entities, if sponsorship of school events is required.

11.9.4.2 Supplier Role

- Ensure contracts explicitly prohibit the marketing of foods and beverages that do not meet school nutritional requirements.

- Actively support the promotion of healthy options using appealing names, icons, and placement strategies.

11.9.5 Food delivery

- **No Food Deliveries:** Students are prohibited from ordering external food during school hours.

11.10 Nutrition and Food Literacy Promotion

Nutrition education and food literacy equip students with lifelong healthy eating habits and a positive relationship with food. This section outlines actionable steps for schools to effectively engage students, train educators, and foster a supportive food culture.

11.10.1 Student Engagement Activities

- Schools should conduct hands-on activities like gardening, cooking sessions, and farm visits to deepen students' understanding of food sources and healthy eating (Nestlé, n.d.; Ministry of Education, Culture, Sports, Science and Technology Japan, 2021).
- Food suppliers need to involve students directly in menu planning, food selection, and meal evaluation to enhance ownership and real-world food skills (Coalition for Healthy School Food, 2024; Finnish National Agency for Education, 2019).
- Schools need to organize annual school-wide nutrition events (e.g., Health Weeks, cooking competitions) to reinforce healthy eating messages in an engaging way (World Population Review, 2025).
- Schools need to teach students how to read and understand nutrition labels to empower informed food choices (QCC, 2024).

11.10.2 School Staff Participation

- Schools staff, including teachers and cafeteria staff, need to attend regular professional training covering basic nutrition, healthy meal standards, and role modeling practices provided by relevant authorities (CDC, n.d.; SNAP-Ed, n.d.).
- Schools need to encourage all staff, including school leaders, to consistently model healthy eating behaviors and positive attitudes towards food (Action for Healthy Kids, n.d.).

11.11 Monitoring and Compliance

11.11.1 Registration, Orientation, and Capacity Building

- All food vendors and school-designated nutrition focal points must complete official registration with the health and nutrition authority (e.g., ADPHC) prior to service delivery.
- Registered vendors and school personnel are required to attend an orientation session covering key school nutrition standards, food safety practices, and student health considerations offered by relevant authorities (World Health Organization, 2021).
- Registered vendors and school personnel are required to attend and complete the capacity-building programs on a recurring basis, including nutrition literacy workshops, food handling certification, and digital reporting tools (World Health Organization, 2021; FAO, 2022).

- Registered vendors and food suppliers need to complete orientation and SEHHI training to be certified and authorized to operate within the school food environment.

11.11.2 Menu and Product Approvals

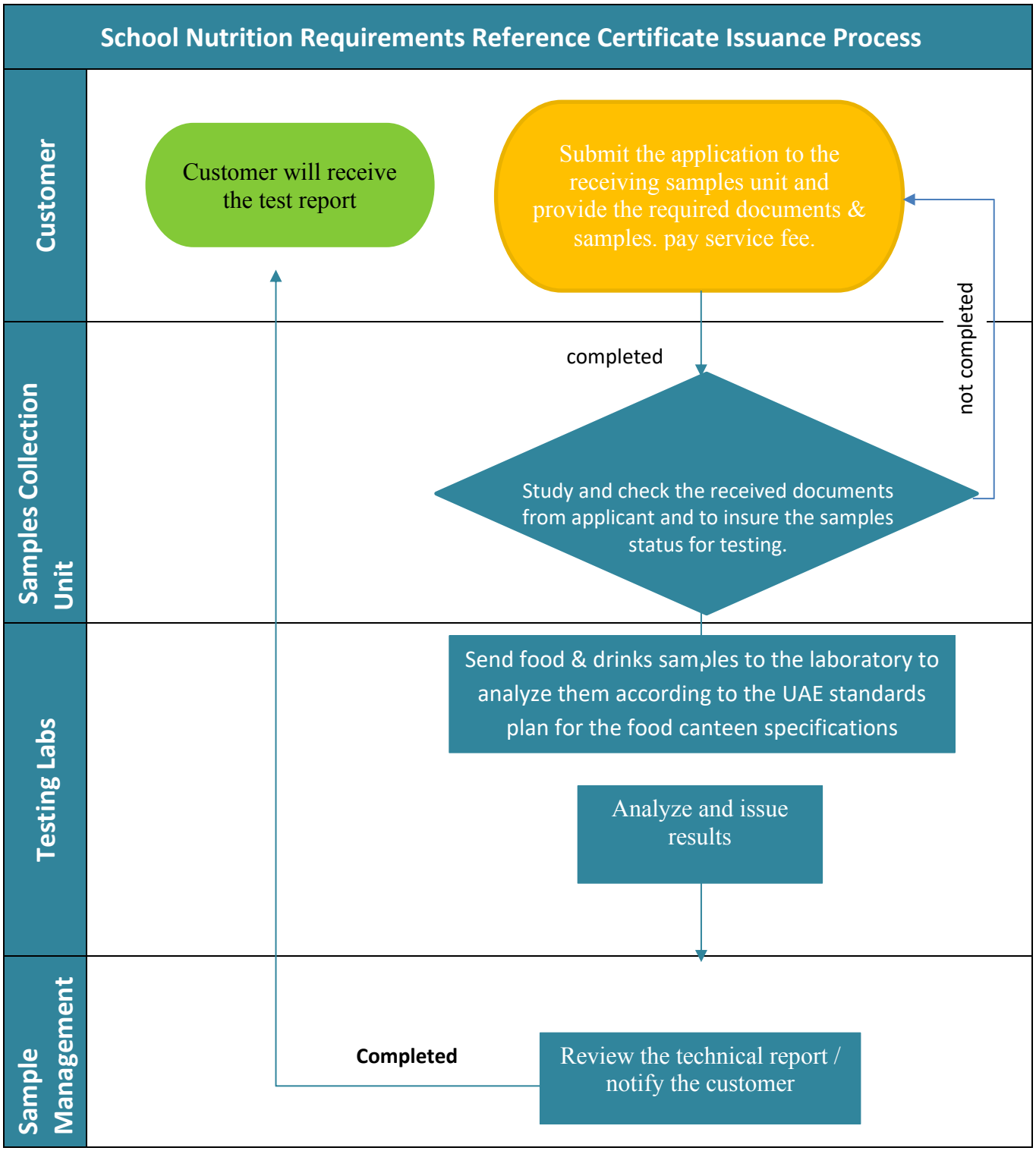
- All food service providers must submit their weekly menus, detailed recipes (including portion sizes and age-appropriate offerings), and product lists for both prepared and prepackaged food and drink items for review and approval by the designated authority (e.g., ADPHC) before implementation (Finnish National Agency for Education, 2019).
- Submissions should include nutritional breakdowns, preparation methods, and sourcing of ingredients (e.g., UAE-grown produce).
- A designated approval team (including ADPHC, ADFSA, and QCC) will assess compliance with the guideline's food categorization (e.g., green/red food groups), dietary requirements, and portion standards (Ministry of Education Japan, 2021).
- Menus that fail to meet criteria must be revised and resubmitted by food suppliers before approval for ADPHC is granted, any modification to the approved menu requires prior notification and re-evaluation by the reviewing entities (ADPHC).
- Food vendors must maintain up-to-date documentation of all food ingredients, including allergens, and clearly record any substitutions made, with justification for nutrition or supply-related reasons. These records must be available for audit and review.

11.11.3 Student Feedback and Food Satisfaction

- Schools must regularly collect student feedback on meals served using age-appropriate surveys, food rating systems, or suggestion boxes.
- Student engagement methods such as menu tasting panels, direct participation in menu planning, and student nutrition ambassadors are encouraged to improve satisfaction and ownership (Ministry of Education, Culture, Sports, Science and Technology Japan, 2021).
- Feedback data should inform menu adjustments, procurement strategies, and staff training sessions (UNICEF, 2020).
- Parents and caregivers may also be surveyed periodically to assess perceptions of the school food environment.

Conformity of the packaged products to the standards contained in the Guidelines here in

The Abu Dhabi Quality and Conformity Council will ensure the conformity of packaged food supplied to educational institutions by issuing a product conformity certificate to the requirements of food handled in educational institutions, in accordance with the following table:



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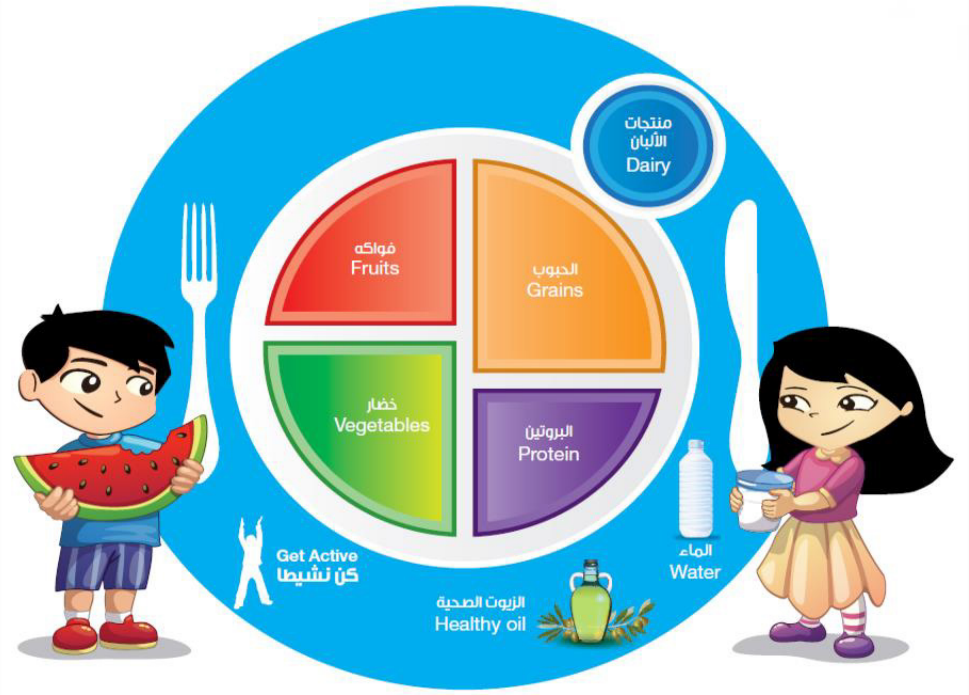


Appendix 1: my plate

My Plate

This section aims to provide appropriate guidance on how to eat balanced and healthy food using my plate.

- **My Plate**

Healthy Plate is designed as a visual tool for the major food groups to help suppliers, students, and educators make healthy food choices. The Healthy Plate has the following characteristics:

1) Food Quality:

The food plate urges consuming diverse food so that it includes all the food groups necessary to be eaten daily and symbolizes the food groups in the different colors on the plate.

2) Food Quantity:

This aspect represents the difference in the amount of food from the food groups recommended to be eaten throughout the entire day as per my plate guideline.

Appendix 2: Reading Nutrition Facts Label

- Find out which food group the food belongs to by looking at the list of ingredients.
- Ingredients are listed in order of weight, from most to least.
- Usually, the first few ingredients help to determine which food group the product belongs to as in the case of yoghurt, where skim milk is the first ingredient. Therefore, this product belongs to the group of milk and substitutes.

Amount (Serving Size)

- The information on the Nutrition Facts table is based on an amount called a serving size, namely the amount of food listed at the top of the nutrition facts table.
- Serving size tells you how much food is used to calculate the numbers in the nutrition facts table.
- The amount of food on the nutrition facts table may or may not be the amount of food you will serve at the educational facility. This is because it may differ from the recommended serving size, where one serving may be more or less than the recommended serving size for individuals.

Daily Value (DV%)

- Daily Value percentage (% DV) is shown on the right side of the nutrition facts table or food label.
- Daily Value percentage in the nutrition facts table on food packages provides a quick overview of a food's nutritional overview, showing how much of the nutrients are in the food or drink.
- A percentage (5% DV) or less means there are few nutrients and (15% DV) or more means there are more nutrients in the food or beverage.
- Daily Value percentage (% DV) may be used to compare two different food products to choose the healthier choice. The (%DV) can be also used to select products that are higher in nutrients that you want more of and lower in nutrients that you want less of.

Reading Nutrition Facts Label: Match the colors in the five squares in numerical order with the food label table below:

Nutrition Facts
Nutrition serving size - one cup (228) gm
Number of servings in the product (20)

Amount per nutrition serving Calories (250)	
Daily nutrition value	
Total fat 12g	18%
Saturated fat 3g	15%
Trans fat 30 g	
Cholesterol 30 mg	10%
Sodium 470 mg	20%
Carbohydrates 31	10%
Dietary fiber 0 g	0%
Sugar 5 g	
Added sugars 10 g	10%
Vitamin A	4%
Vitamin C	2%
Iron	20%
The percentage of the daily value determines the amount of nutrients per servi ng out of the total daily individual need and daily 2000 calories are used as gene ral nutrition advice.	

Nutrition Serving size 1	Daily Nutrition Value 2
Start reading the daily serving which shall be by cups or by piece, and it is calculated by grams or milligrams because the entire label facts apply to each serving rather than the full pack or product. Therefore, it is important to focus on the serving to avoid taking more or less of the daily serving.	Pay attention to the daily nutrition value that determines the p ercentage of such a product per one serving, where 5% or less i s considered low, and 15 % or over is considered as high.
Calories 3	**Less than 4**
Make sure about the calories per serving. The general rule for estimating calories in any product: 40 calories considered to be low, 100 medium calories considered to be medium, and 400 calories or over considered to be high.	Reduce such elements as they are the most dangerous ones th at would cause chronic diseases, which must be reduced.
Be sure about 5	Match colors with the table
Make sure to have enough of such nutrients to improve health.	

Appendix 3: Nutrient deficiencies in students and ways to increase their availability of food

How to Increase the Iron, Vitamin D and Calcium Content of School Food: Research shows that some students in the UAE do not get enough iron, vitamin D and calcium in their diets to support their rapid growth. Here are some ways to increase their intake of these important minerals and vitamins.

- Sources of iron, vitamin D, and calcium in each food group:

Carbohydrates	Fruits and Vegetables	Milk and dairy products	Meat, fish, eggs, grains, and other non-dairy products are sources of protein
Iron: **(whole wheat) bread** **Fortified breakfast cereals**	Iron: • Legumes e.g. chickpeas, lentils, and beans (not green beans) • dried apricot • raisins	Calcium: • Milk • Yogurt • Cheese	Iron: • Lean red meat e.g. beef, lamb • Legumes e.g. chickpeas, lentils, and beans (not green beans)
Calcium: • **Bread (except whole grain).** • **Calcium-fortified bread products**	Calcium: • Cabbage • Okra • spinach • dried figs	Vitamin D • Vitamin D fortified milk • Vitamin D fortified cheese	Vitamin D • Yolk • Fatty fish such as tuna and salmon
Vitamin D • **Breakfast cereal fortified with vitamin D**	Vitamin D • Fortified orange juice • Mushroom		

Appendix 4: food allergies and food intolerance

Food Allergens:

- Peanuts: Peanuts are one of the most common food allergens and can trigger severe allergic reactions.
- Tree Nuts: Tree nuts like almonds, walnuts, cashews, and pistachios can also cause allergic reactions in susceptible individuals.

- Milk: Cow's milk allergy is common, especially in young children, and can manifest with symptoms ranging from hives to anaphylaxis.
- Eggs: Egg allergies are prevalent in children and can cause skin, respiratory, or gastrointestinal symptoms upon ingestion.
- Fish and Shellfish: Allergies to fish and shellfish, such as shrimp, crab, or salmon, can range from mild to severe and may develop in adulthood.
- Soy: Soy allergy is more common in children and can cause allergic reactions when consuming soy-based products.
- Wheat: Wheat allergy can lead to symptoms such as hives, difficulty breathing, or anaphylaxis, and is distinct from gluten intolerance or celiac disease.

Main symptoms of food allergens:

- Skin Reactions: Hives, itching, eczema, or swelling (angioedema) of the face, lips, tongue, or throat.
- Respiratory Symptoms: Wheezing, difficulty breathing, nasal congestion, or runny nose.
- Gastrointestinal Issues: Nausea, vomiting, abdominal pain, or diarrhea.
- Cardiovascular Symptoms: Rapid heartbeat, low blood pressure, or fainting (in severe cases).
- Anaphylaxis: A severe, life-threatening allergic reaction characterized by a sudden onset of symptoms affecting multiple body systems, including difficulty breathing, swelling of the throat, and a drop in blood pressure.

Types of Food Intolerance:

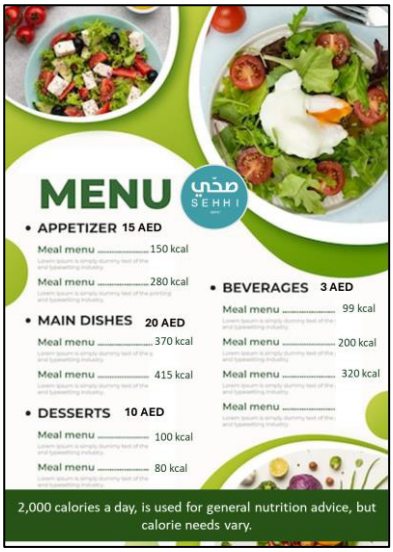
- Lactose Intolerance: Lactose intolerance occurs due to insufficient lactase enzyme production, leading to gastrointestinal symptoms like bloating, gas, or diarrhea after consuming dairy products (Cleveland Clinic, 2023).
- Gluten Intolerance: Gluten intolerance, including non-celiac gluten sensitivity, results in digestive discomfort and other symptoms after consuming gluten-containing grains like wheat, barley, and rye (Mayo Clinic, 2023).
- FODMAP Intolerance: Some individuals experience intolerance to certain fermentable carbohydrates known as FODMAPs, which can trigger symptoms like bloating, abdominal pain, and altered bowel habits (Monash University, 2023).
- Histamine Intolerance: Histamine intolerance occurs when the body has difficulty breaking down histamine-rich foods, leading to symptoms like headaches, hives, or digestive issues (Cleveland Clinic, 2023).

- Fructose Malabsorption: Fructose malabsorption involves difficulty digesting fructose, a sugar found in fruits, honey, and certain vegetables, leading to gastrointestinal discomfort like bloating and diarrhea (Mayo Clinic, 2023).

food intolerance main symptoms

- Skin Reactions: Hives, itching, eczema, or swelling (angioedema) of the face, lips, tongue, or throat (AAAAI, 2023).
- Respiratory Symptoms: Wheezing, difficulty breathing, nasal congestion, or runny nose (NIAID, 2023).
- Gastrointestinal Issues: Nausea, vomiting, abdominal pain, or diarrhea (FARE, 2023).
- Cardiovascular Symptoms: Rapid heartbeat, low blood pressure, or fainting (in severe cases) (Mayo Clinic, 2023).
- Anaphylaxis: A severe, life-threatening allergic reaction characterized by a sudden onset of symptoms affecting multiple body systems, including difficulty breathing, swelling of the throat, and a drop in blood pressure (AAAAI, 2023).

Appendix 5: Different methods on How to add SEHHI logo

	
Image A1.1: SEHHI logo can be added on the packed product	**Image A1.2:** SEHHI logo can be added and placed on the Menu

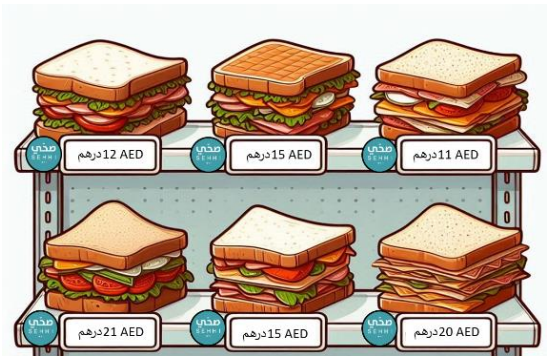



Image A1.3 SEHHI logo can be placed on the Shelves	**Image A1.4:** SEHHI logo can be printed on the price tag

Appendix 6: Plant- based protein sources

			
Broccoli	Peas	Lentil	Spinach
			
Chickpeas	Beans	Edamame	Quinoa

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