



Nutrition & You

TEENAGERS





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The Teenage Years

During the teenage years, as we transition from childhood to adulthood, it is important to eat well to support this phase of rapid growth and development.

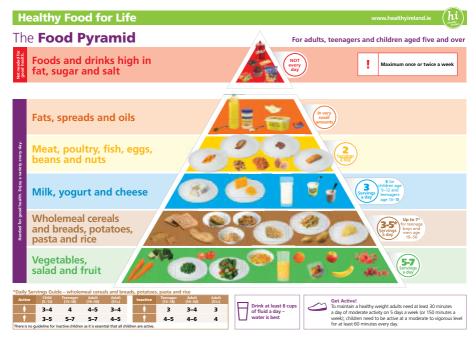
This is an exciting time as we mature to make our own decisions about what we eat. Many influences can shape our choices such as personal values and beliefs, our peers, social media and our knowledge about nutrition.

This booklet provides some helpful tips and nutritional facts to help you make the best daily choices for you.



Healthy Eating

Balance is key to healthy eating, with energy and nutrient needs varying depending on factors such as gender, age, body size, growth phase and physical activity levels. The Department of Health's Food Pyramid provides guidance on daily servings from each food group, with a variety of foods from the bottom four shelves recommended for a good range of vitamins and minerals.



Source: Department of Health, December 2016.

Clever choices

- Include a variety of fruit and vegetables daily across meals and snacks. Irish teens are not consuming enough fruit and vegetables having an average of less than three servings per day – much lower than the recommended 5-7 servings per day¹
- Reduce your intake of fried and processed foods e.g. swap fried, breaded chicken for plain chicken breast
- Keep foods high in fat, sugar and salt as treats (not every day) e.g. crisps, sweets, biscuits
- Opt for water or milk as your drink of choice. Limit sugary drinks e.g. lemonade, cola, energy drinks to special occasions. Remember that energy drinks can be high in sugar and caffeine and are not recommended for those under 16 years of age
- Be prepared bring healthy snacks (e.g. plain nuts or a piece of fruit) when out and about and choose wisely in cafés, restaurants or at the deli

Smart snacks

Try to choose nutritious snacks when faced with an energy slump. Examples include:

- Baked or sweet potato with: beans and grated cheddar or tuna and sweetcorn mixed with natural yogurt
- Homemade smoothie made with milk and/or yogurt with fruit e.g. banana, mixed berries
- Grilled cheese on wholegrain toast topped with tomatoes and onion
- Rice cakes or oatcakes with peanut butter
- Chopped vegetable sticks (cucumber, carrots, peppers) with a yogurtbased dip

Break the Fast!

Having a nutritious breakfast is a healthy habit to boost energy and concentration for a busy morning. Try porridge/unsweetened cereal with milk and berries; scrambled eggs on wholegrain toast; or homemade granola with chopped fruit and yogurt.

Beware of the Fad!

While celebrities may boast the success of diet fads or trends, try and avoid the hype. Having a balanced diet and an active lifestyle is the best way to maintain a healthy body weight and ensure we meet our nutrient needs.

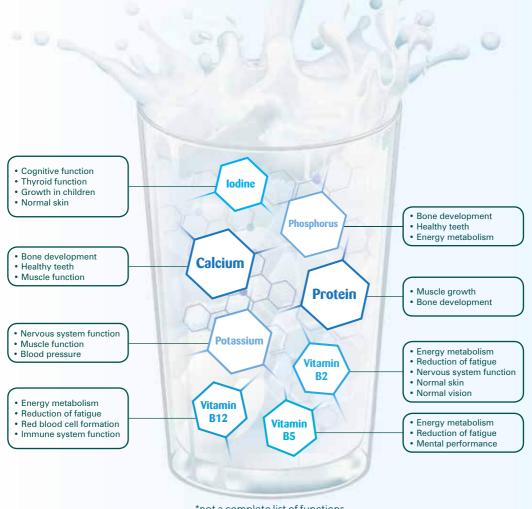
Take Five!

Five servings per day are recommended from the 'milk, yogurt and cheese' food group for those aged 9-18 years, with 3 servings daily recommended for all other age groups. This increased requirement during the teenage years is because of the importance of calcium during this life stage to support normal bone development (see page 9). Currently Irish teenagers are falling short of these recommendations. The latest Irish research shows that Irish teenagers have inadequate calcium intakes (51%) and inadequate intakes of riboflavin (20%)¹. Milk is a good source of both these nutrients, see page 5.



Dairy - a Matrix of Nutrients

The nutrients in milk contribute to the normal functioning of many processes in our bodies*:



*not a complete list of functions. Source: EU register of nutrition and health claims made on foods

Dairy Myths Busted!

Milk, yogurt and cheese are established as nutrient-rich foods to be included as part of a healthy, balanced diet. However, misinformation can cause confusion and, worryingly, some people may compromise their nutritional intakes by excluding or limiting important food groups based on inaccurate information. Here we dispel some common dairy myths...

Acne

Acne is a condition which usually presents during puberty and is caused by fluctuations in hormones, resulting in the overproduction of oily secretions by glands. Due to the complex nature of acne which can be influenced by genetics, skin type and hormones, a simple explanation of acne being 'caused by' any single food is unlikely. There is no sufficient evidence to recommend changes to the intake of dairy products for the management of acne. In fact, a number of nutrients provided by milk are known to play a role in normal skin health, such as vitamin B2 and jodine.

Body weight

Some may mistakenly believe that they should avoid or limit their intake from the 'milk, yogurt and cheese' food group to maintain a healthy body weight. However, you may be surprised to hear that whole ('full-fat') milk typically contains 3.5% fat; semi-skimmed milk around 1.5-1.8% fat and skimmed milk no more than 0.5% fat. There is also a wide range of yogurt and cheese varieties on our supermarket shelves to choose from, with low-fat versions remaining sources of important nutrients such as calcium, protein and B vitamins.

Allergy & Intolerance

Food allergies and food intolerances are two different conditions, but they often get confused.

Cow's milk allergy is an adverse reaction to cow's milk protein and is most common in early childhood, affecting about 2-3% of infants. Avoidance of dairy products is necessary in these cases but children usually outgrow this allergy by the age of 3-5 years.

Lactose intolerance is a condition which results in a reduced ability to digest the natural sugar in milk called lactose. The prevalence of lactose intolerance varies worldwide but is much lower in Ireland than perceived, with only 4-5% of the population affected. Depending on the level of tolerance most people affected by this condition can consume some lactose.

It is very important not to 'self-diagnose' an allergy or intolerance, with diagnosis by a qualified healthcare professional such as a GP necessary. Consultation with a dietitian is also essential to manage these conditions and ensure nutrient intakes are not compromised.

Sustainable Irish Dairy – Top Class

Irish dairy cows graze on luscious green grass for most of the year - making the quality and flavour of our dairy products internationally renowned. Irish dairy has one of the lowest carbon footprints internationally. This is due to its efficient, grass-based production system. Irish data now shows a 10% reduction in the carbon footprint per kg of milk, with efforts continuing to improve.

Irish farmers look after their cows very well and it has been shown that cows under good care produce the best quality milk. Specific practices are also in place to ensure the highest quality and safety of milk production. It is worth pointing out that in Ireland and the European Union, there is a total ban on the use of artificial hormones for milk production.



Eating Sustainably

Sustainable diets must be something we can maintain in the long term.

Therefore, they should be:

- 1. Nutritionally adequate, safe and healthy
- 2. Culturally acceptable and accessible
- 3. Economically fair and affordable
- **4.** Environmentally protective (respectful of biodiversity and ecosystems)

The emphasis on each of these pillars needs to be adjusted so that there is harmony between them. Balancing each one in relation to the other supports sustainability (Figure 1).



Figure 1: The components of a sustainable diet²

Tips for Sustainable Eating

- Include an abundance and variety of fruit and vegetables
- Include wholegrains and high fibre carbohydrates
- Boost nutrient intakes with moderate amounts of dairy
- Include legumes and nuts; moderate amounts of eggs, poultry and fish; and small amounts of red meat
- Include safe tap-water as the fluid of choice
- Try not to consume more than you need (see page 2 for suggested serving sizes from the Irish healthy eating guidelines)
- Reduce food waste



Don't be a lazy bones!

Just as a sturdy house needs a strong foundation, a healthy body needs a strong skeleton. The teenage years are an important time for the development of our skeleton. Looking after our bones during this phase of rapid growth will have a positive impact on our bone health for life.

While bone health is determined mainly by factors that we cannot control such as genetics, gender and age; factors we can control include the foods we eat and the type of physical activity that we do. Participating in regular weight-bearing activities, which put the full weight of the body on our feet and legs, is essential for our bone health (see examples on page 10). Other bone-friendly tips include maintaining a healthy body weight, not smoking and avoiding alcohol.

Eat well

Having a balanced diet which includes bone-friendly nutrients such as calcium, protein, phosphorus and vitamin D is essential. Dairy foods such as milk, yogurt and cheese are among the best sources of dietary calcium while also providing protein and phosphorus.

Vitamin D assists with the absorption of calcium and phosphorus. Although vitamin D is known as the 'sunshine vitamin', here in Ireland we are particularly reliant on dietary sources which are limited but include: oily fish (e.g. salmon, mackerel); egg yolk; and dairy products/cereals with added vitamin D. Currently 94% of Irish teenagers have inadequate vitamin D levels¹. The Department of Health advises people to take a daily supplement containing 10 micrograms of vitamin D during autumn and winter.



Move More - Feel Great

Being physically active is very important for our health and wellbeing, as well as providing a great way to socialise with friends and spark new interests.

As teenagers we may become more reliant on technology as a form of entertainment – even for socialising – but this can lead to less time being active. Try to balance your daily 'screen time' (TV, computer, phone, tablet etc.) with time spent taking part in physically active hobbies.

Teenagers should be active for at least 60 minutes every day, at a moderate to vigorous level, and should include muscle-strengthening, flexibility and bone-strengthening exercises three times per week.

Moderate Activity:

Breathing and heart rate increases but conversation can still be carried out. You feel warm and sweat slightly. Examples: cycling, brisk walking, PE class.

Vigorous Activity:

Breathing is heavy and it is more difficult to carry out a conversation. Heart and sweat rates are faster. Examples: running, certain dance styles e.g hip-hop, team sports such as football, basketball, hurling/camogie.

Muscle-Strengthening activities include: Climbing walls, push/pull/sit-ups, hand-held weights.

Bone-Strengthening activities include: Rope skipping, running, dancing, tennis, most team sports.

Flexibility activities include: Gymnastics, martial arts, yoga, pilates.

Top Tips for Sports Performance

Along with adequate amounts of training, dedication, talent, sleep and recovery, fuelling your body with the right food and fluid for sport or a physically active hobby will help you perform your best.

Keep your balance

Energy and nutrient needs vary depending on gender, age, body size, activity levels and the specific demands of your sport/activity. However, whatever the activity or level, it is important to get the basics right by following the guidelines for a healthy, balanced diet (see pages 2-3).

It's common sense

There are no shortcuts - effective training and sensible eating are key. If needed, a sports dietitian can tailor food and fluid advice to specific needs and goals. Remember, as sports supplements have not been tested on teenagers there is no evidence they are appropriate for a growing body and are not recommended for those under 18 years of age.

Food as fuel

Fuel up 2-3 hours before training or a match e.g. pasta or rice with tomato-based sauce and chicken, baked potato with beans and cheese, or vegetable soup with a sandwich. If needed, top up energy with a carbohydrate-based snack 60 minutes before sport e.g. small bowl of cereal with low-fat milk or a fruit smoothie.

Protein power

Protein foods (e.g. milk, lean meat, eggs, beans, lentils, cheese, fish, yogurt) should be included at each meal time. Consuming protein foods following an intense exercise session is particularly useful to assist muscle growth and repair.

Drink up!

Ensure adequate hydration when beginning sport or activity by drinking fluid throughout the day. A clear to pale yellow urine colour is an indicator of good hydration levels. Rehydrate afterwards to replace fluid lost; water or low-fat milk are good options.

During sport

There is generally no need for an energy top-up during sport if the session duration is less than 60 minutes, but continue to drink water during breaks of activity to stay well hydrated. For longer sessions, orange segments can be a useful fuel top-up at sporting intervals.

Recover well to play well

Effective recovery is essential to perform your best in the next session. If your next meal is a while away, aim to eat within 30-60 minutes after exercise to refuel nutrients e.g. sandwich with chicken/tuna/cheese, low-fat/skimmed milk with a banana, or yogurt with homemade granola.

Milk it!

Milk naturally provides fluid, protein, carbohydrate and electrolytes, as well as many important nutrients for health (see page 5). Exciting research is exploring the benefits that milk may play in a number of aspects of recovery, with roles for rehydration and muscle recovery being investigated.



Further Reading

The National Dairy Council **www.ndc.ie**

Irish Nutrition and Dietetic Institute - Factsheets **www.indi.ie/fact-sheets**

Safefood www.safefood.net

Department of Health - The Food Pyramid (2016) **www.healthyireland.ie**

Get Ireland Active - Promoting Physical Activity in Ireland **www.getirelandactive.ie**

Irish Osteoporosis Society www.irishosteoporosis.ie

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This booklet is a general nutrition information resource and is not tailored to individual dietary requirements.



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