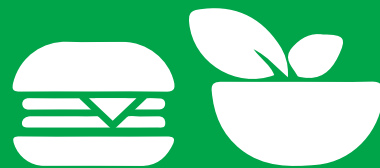


UNITED EUROPEAN
GASTROENTEROLOGY

ueg public affairs

**Nutrition and Chronic
Digestive Diseases:
An Action Plan for Europe**



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“

Healthcare systems across Europe are under increasing pressure, driven by rising numbers of overweight and obese children and adults. For the foreseeable future these rates are only set to rise, leading to one of the greatest and most significant public health challenges we face today.

Obesity, often driven by poor nutritional choices, increases the risk of a range of serious health conditions, including digestive cancers and liver disease. This causes a significant healthcare burden, high societal costs, misery for patients and ultimately, shortens lives.

Healthy balanced diets and lifestyles can help prevent chronic digestive diseases. The difficulty we face is ensuring our citizens make the right choices in following these lifestyles. In this report, we lay out the case for change and a plan of how, with the right mix of public health interventions, we can begin to deliver improved nutrition for our continent.

If we are to fight the burgeoning prevalence of overweight, obese and unhealthy people in Europe, and the suffering, healthcare burden and loss of life that brings, then we must act now. There is not a moment to lose.

”

Markus Peck

UEG Public Affairs Committee;

Chairman at the Department of Internal Medicine and Gastroenterology (IMuG) at Klinikum Klagenfurt am Wörthersee, Austria

OBESITY AND CHRONIC DIGESTIVE DISEASES IN ADULTS

Weight problems and obesity have become a European-wide epidemic, with over half of the EU's population (18 and over) considered as overweight in 2014.¹

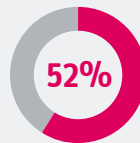
Obesity rates continue to increase at a rapid and concerning pace across Europe, with little expectation that obesity figures will decrease or plateau in the near future.²

A multitude of digestive and liver diseases have been attributed to obesity and weight problems, and are consistently linked to digestive cancers, inflammatory bowel disease (IBD) and coeliac disease. Studies demonstrate that obesity can increase the risk of colorectal cancer by 50 percent, particularly in men.³ Additionally, almost 75 percent of obese individuals have a fatty liver, potentially leading to the development of non-alcoholic liver disease (NAFLD).³

Obesity can also present significant treatment challenges, with weight problems causing technical challenges in colorectal cancer surgery and an increased risk of perioperative complications.⁴

Obesity places a substantial and marked strain on public healthcare systems across Europe. Both direct and

indirect obesity costs have an evident effect on European society, leading to overstretched healthcare systems, loss of workplace productivity and decreased quality of life.



52% OF THE ADULT POPULATION IS OVERWEIGHT OR OBESE IN THE EU¹

Studies have highlighted the correlation between obesity and social mobility, with lower incomes being linked to a higher risk of obesity and vice versa, leading to an inter-generational cycle of poverty. Findings also suggest that obesity can be a cause of lower income due to stigmatisation and market discrimination⁵ and this can also lead to damaging mental health problems.

Incidence of obesity amongst the

elderly European population is also increasing,⁶ highlighting the need for preventative regimens to target high-risk groups.

Healthy lifestyle choices act as the most effective preventative measure against obesity and subsequent digestive diseases.

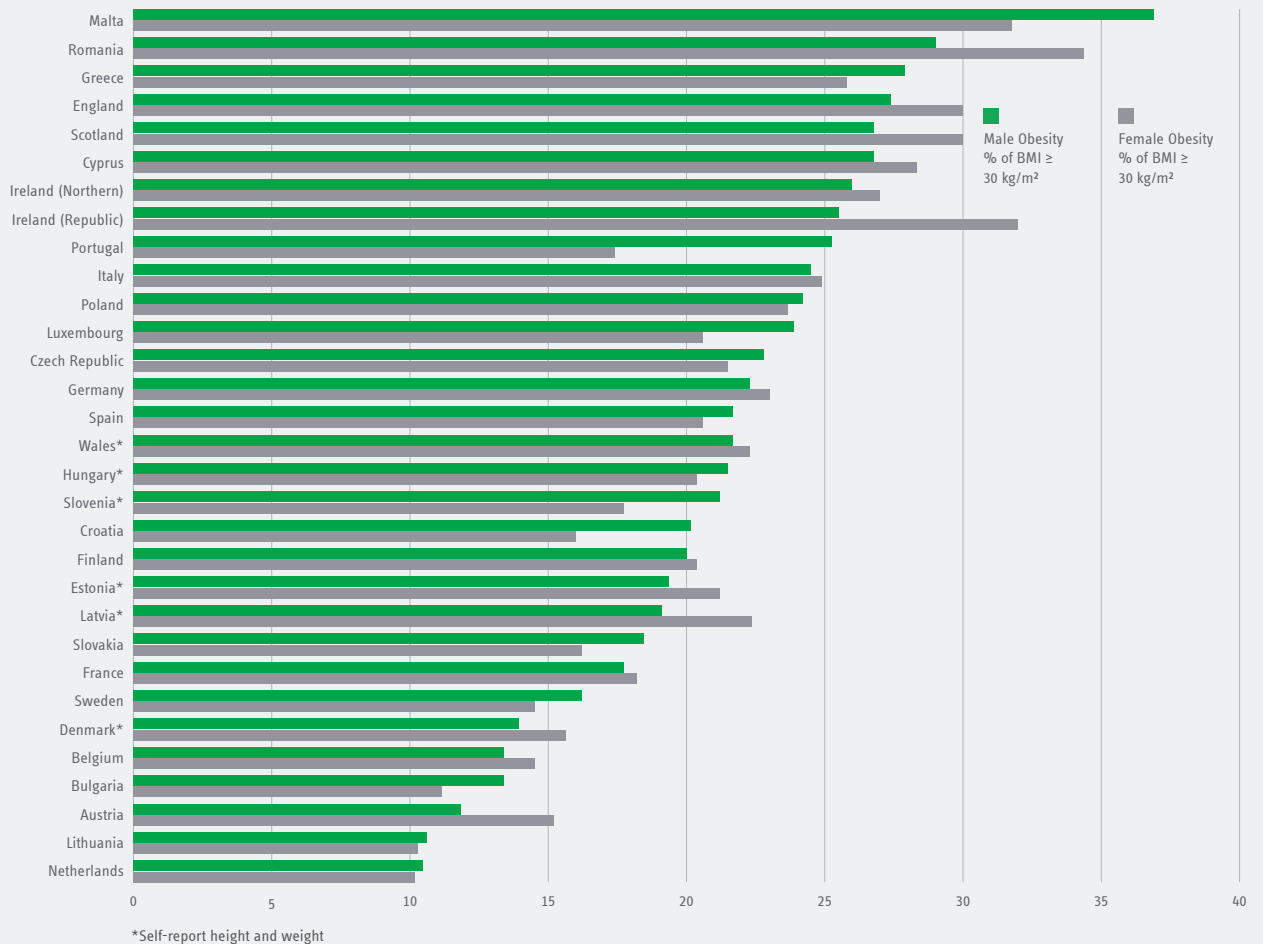
A healthy diet can significantly reduce the risk of obesity. Whilst regular physical activity leads to a reduction in body fat and, in turn, can lessen the risk of digestive diseases.



OBESITY-RELATED COSTS DRAIN €81 BILLION FROM EUROPEAN ECONOMIES PER YEAR²

OBESITY AND CHRONIC DIGESTIVE DISEASES IN ADULTS

% Adult Obesity Rates in selected European countries⁷



OBESITY AND CHRONIC DIGESTIVE DISEASES IN CHILDREN

Childhood obesity poses a particularly worrying threat to Europe. Recent studies report that one in three children in Europe between the ages of six and nine are either overweight or obese, with this figure set to increase substantially in the near future.⁸ Weight problems during childhood are related to a wide range of digestive diseases that continue to develop throughout an individual's lifespan.

Studies have shown that most overweight or obese children now live in developing countries, where the rate of increase is more rapid than in developed countries⁹. The latest data shows that childhood obesity is most prevalent across southern European countries, such as Malta, where over 40% of boys are considered overweight.⁷ Experts have attributed this to the loss of the traditional Mediterranean diet, which typically consists of plant-based foods and olive oil, a moderate intake of fish and limited consumption of dairy, red meat and sugary foods.¹⁰ Processed and artificial foods have gradually replaced this diet.

In most countries across Europe, the alarming childhood obesity rates are simply related to excess daily calorie intake. Children in England, for example, are amongst the most overweight in Europe, with boys and girls consuming nearly 500 and 290 excess calories per day respectively.¹¹

Childhood obesity has been linked to numerous health complications that

endure into adulthood. Paediatric liver disease is emerging as one of the most significant complications of childhood obesity. Recent studies in Germany, for example, have demonstrated a prevalence of NAFLD in overweight and obese children and adolescents of up to 30%.¹² Evidence has also demonstrated that NAFLD in the paediatric age group is associated with additional cardiovascular conditions. With four in five obese adolescents continuing to have weight problems as adults, digestive diseases related to obesity begin to become more prevalent throughout adulthood.¹¹

Additionally, childhood obesity can cause added psychological pressures on children, leading to anxiety and depression. These stresses can negatively affect a child's education, with reports linking obesity to lower rates of educational attainment and future incomes.⁹

Recognising the causes of childhood obesity represents the first step in tackling the issue. Addressing ingrained family habits, such as

the types of food available in the house and portion sizes and sugared beverages that are consumed, can help to reduce the risk of childhood obesity. On a governmental level, the promotion of healthy foods and barriers to the aggressive marketing of fast-food and sugared beverages can potentially help stem the epidemic.



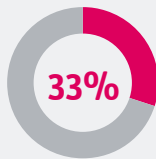
The economic burden of treating obesity is too great for the European region and priorities need to change quickly. With growing evidence of the link between nutrition in early life and obesity, we must prioritise research into the underlying mechanisms and focus our resources and training on prevention strategies.



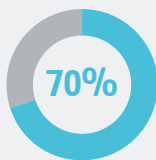
Herbert Tilg

Medical University Innsbruck, Innsbruck, Austria
(EHMSG Representative)

OBESITY AND CHRONIC DIGESTIVE DISEASES IN CHILDREN

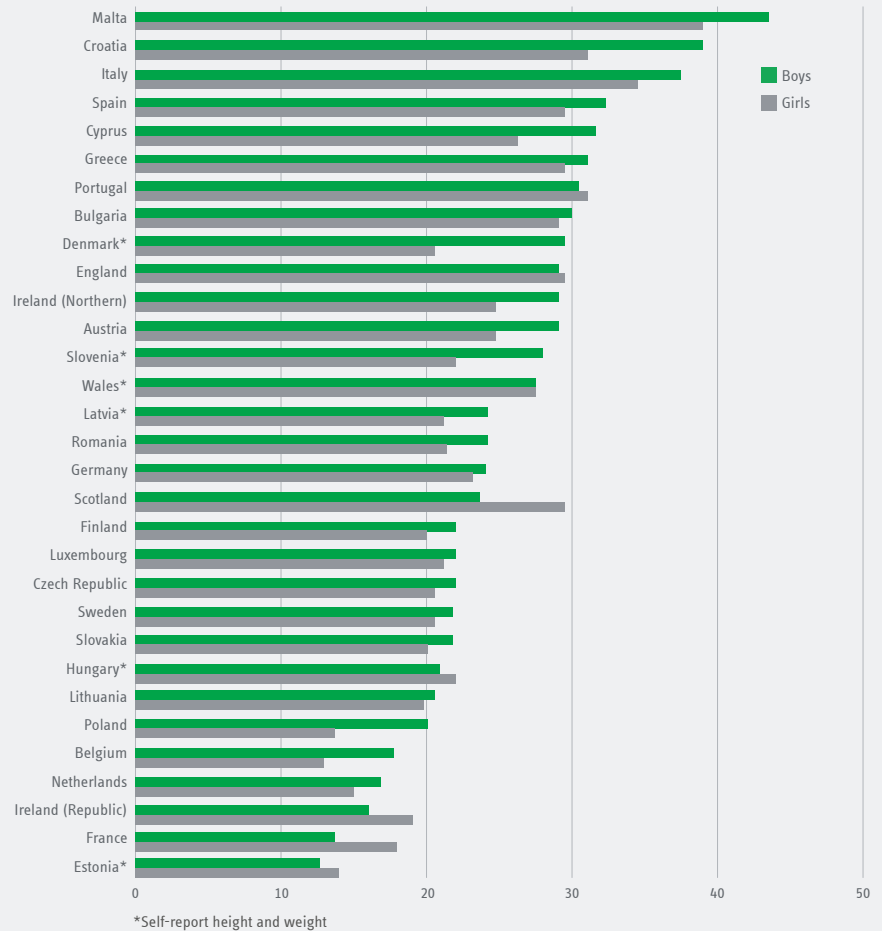


1 IN 3 OF EUROPE'S SCHOOL-AGE CHILDREN ARE ESTIMATED TO BE OVERWEIGHT⁸



CHANGES IN FOOD HABITS AMONGST YOUNG PEOPLE COULD REDUCE THEIR RISK OF COLORECTAL CANCER BY 70%¹³

% of overweight children in selected European countries⁷



PROCESSED FOODS AND DIGESTIVE DISEASES

The increasing consumption of ultra-processed foods is of deep concern. These foods often go through multiple processes and modifications prior to consumption and typically contain many added ingredients and chemicals. They are often produced by large corporations and are ready to consume and extremely durable, providing a commercial advantage over perishable, often healthier, minimally processed foods¹⁴.

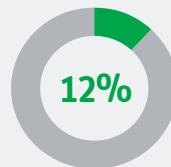
Processed and Ultra-processed Foods

Processed foods are defined as any food that has been modified during preparation. This can be as simple as freezing, canning or baking ingredients and common examples include plain breakfast cereals, whole-wheat bread or tinned vegetables. Whilst processed foods can often be high in salt, sugar and fat, it should be noted that not all processed foods are unhealthy and some foods require processing to make them safe to consume.

Ultra-processed foods, however, often have a higher content of saturated fat, added sugar and salt, along with a lower fibre and vitamin density. Common examples of ultra-processed foods are soft drinks, confectionary, crisps, cakes, frozen ready meals and processed meats, such as sausages.

Many countries have seen a dramatic increase in the

consumption of processed and ultra-processed foods in recent decades, with research stating that ultra-processed food products contribute to between 25% and 50% of total daily energy intake¹⁵ and account for 90% of added sugar consumed.¹⁶ In the 10 countries participating in the European Prospective Investigation into Cancer and Nutrition (EPIC), which included 36,034 individuals, highly processed foods contributed between 61% (Spain) and 78-79% (the Netherlands and Germany) of mean energy intake¹⁷.



A 10% INCREASE IN THE PROPORTION OF ULTRA-PROCESSED FOODS IN THE DIET IS ASSOCIATED WITH A 12% INCREASE IN OVERALL CANCER RISK¹⁵

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The consumption of ultra-processed foods has increased dramatically and mirrors increased obesity prevalence. In order to achieve longer-lasting compliance of healthier diets, a specific choice of dietary patterns should be tailored to suit patients in different geographical regions by ensuring food availability and controlled costs.

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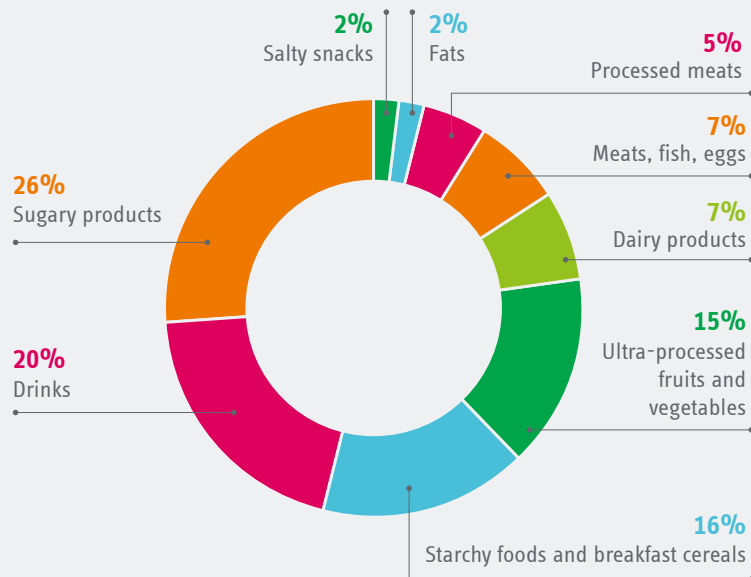
Shira Zelber-Sagi

University of Haifa & The Tel-Aviv Medical Center, Tel-Aviv, Israel

PROCESSED FOODS AND DIGESTIVE DISEASES

Studies have demonstrated that the consumption of ultra-processed foods is associated with an increased risk of cancer¹⁵, suggesting that the rapidly increasing consumption of ultra-processed foods may drive the increasing burden of cancer in coming decades. As well as a preventative measure, improved diet and nutrition is outlined by the European Cancer Organisation (ECCO) as an essential requirement for establishing optimal treatment and care for digestive cancer patients¹⁸ to help maximise chances of survival.

Relative contribution of each food group to ultra-processed food consumption in diet¹⁵



Salt Consumption

Research has shown that excessive salt consumption damages the lining of the stomach, causing lesions which can develop into gastric cancer.¹⁹ High dietary salt intake also exacerbates gastric damage induced by the *Helicobacter pylori* infection (the most well-established risk factor for gastric cancer),²⁰ which claims the lives of almost 60,000 EU citizens annually.²¹



There is high awareness of the link between high salt intake and cardiovascular-related health problems, but we suspect very few people are aware that a high-salt diet may also increase the risk of gastric cancer. Studies have shown that salt intake higher than 10g per day significantly increases the risk of stomach cancer.



Tamara Matysiak-Budnik
University Hospital of Nantes, Nantes, France
(EAGEN Representative)

PROCESSED FOODS AND DIGESTIVE DISEASES

Red and Processed Meat Consumption

Evidence has shown that red and processed meat consumption increases the risk of colorectal cancer²² and the Global Burden of Disease Project has estimated that diets high in red meat could be responsible for 50,000 cancer deaths per year worldwide.²³ Studies predict that every 50-gram portion of processed meat eaten daily increases the risk of colorectal cancer by 18% and every 100-gram portion of red meat eaten daily increases the risk by 17%.²³

“

There is strong evidence that eating red and processed meat can increase your risk of colorectal cancer. People should aim for no more than three portions of red meat per week, using the palm of their hand as a recommended portion size, and strive to eat more fibre, fish, pulses and beans to help reduce their risk.

”

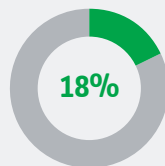
Stefan Gijssels
Executive Director, Digestive Cancers Europe (DiCE)

“

Chemicals produced after cooking red and processed meat at high temperatures, following metabolic activation, have been shown to cause a greater risk of colorectal cancer. While the International Agency for Research on Cancer have classified that red and processed meat is “probably carcinogenic to humans”, moderate consumption of meat does have its advantages, being a key source of essential macro- and micronutrients.

”

Thomas Seufferlein
Ulm University Hospital, Ulm, Germany (ESDO Representative)



EVERY 50G PORTION OF PROCESSED MEAT EATEN DAILY INCREASES CRC RISK BY 18%²³

High general meat consumption, as well as high red and processed meat intake, are associated with NAFLD, which is likely to emerge as a leading cause of end-stage liver disease in coming decades.²⁵

“

NAFLD is the most common liver disorder in Western countries and has become a public health concern worldwide. The increasing prevalence of the disease is associated with rising levels of obesity, caused by unhealthy dietary habits and sedentary lifestyles.

”

Helena Cortez-Pinto
University Hospital of Santa Maria, Lisbon, Portugal (EASL Representative)



HIGH CONSUMPTION OF RED AND PROCESSED MEAT IS ASSOCIATED WITH AN INCREASED RISK OF NAFLD²⁴

PROCESSED FOODS AND DIGESTIVE DISEASES

Sugar Consumption

Sugar is a broad term that encompasses both naturally occurring sugar and free sugar.

Naturally occurring sugar refers to sugars naturally found in products and common examples include fruits and vegetables.

Free sugar is defined by the World Health Organisation as all monosaccharides and disaccharides which have been added to foods and beverages by the manufacturer, cook or consumer, plus sugar naturally present in honey, syrups, fruit juices and fruit juice concentrates. Excessive intake of free sugar is associated with a range of health conditions, both immediately and in later life, including abdominal pain, bloating, chronic diarrhoea and obesity.²⁶ Current recommendations on sugar intake focus on free sugars, as these are the major contributors to adverse health conditions and weight gain.

With alarming trends in the levels of overweight and obese children, tackling paediatric sugar intake is an immediate public health priority.



There is no nutritional need for free sugar in children and tackling this intake is vital to reducing unnecessary weight gain. Where possible, sugar should be consumed in a natural form and in main meals, rather than in snacks.



Magnus Domellöf

Umeå University, Umeå, Sweden (ESPGHAN Representative)

Saturated Fats and Trans-fats

Fat is an essential component of a healthy and balanced diet, producing vital fatty acids that the body is unable to make itself. Different types of fat have different effects, and a diet high in saturated fat can have extremely adverse effects on the human body. Excessive saturated fat intake is associated with an increased risk of obesity and NAFLD and high cholesterol intake has been demonstrated to be associated with a higher risk of cirrhosis or liver cancer²⁷.

In contrast, consumption of the unsaturated fat omega-3 has a protective association with liver cancer²⁸ and the Mediterranean diet has been shown to lower the risk of liver²⁹ and colorectal cancer³⁰. There is currently a strong consensus that trans-fats (types of unsaturated fat widely used in foods such as margarine, frying oils and snacks) should be completely avoided. Consuming trans-fats increases levels of low-density lipoprotein ('bad' cholesterol) that may be damaging to arteries and also promotes obesity. Countries such as Switzerland, Denmark and Britain have taken steps to restrict or ban trans-fats, which should be a key action across the rest of Europe.³¹



The reformulation of food products and legislation to ban the use of industrial trans-fats are feasible, evidence-based interventions that can be applied to reduce the widespread and unhealthy consumption of saturated fats, trans-fats and added sugar.



Shira Zelber-Sagi

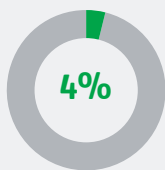
University of Haifa & The Tel-Aviv Medical Center, Tel-Aviv, Israel

EARLY NUTRITION

The first 1,000 days of life – the approximate time between conception and a child’s second birthday – is a unique period of opportunity when the foundations of optimum health, growth, and development across the lifespan are established. Too frequently, our approach to nutrition, whether it be undernutrition or overnutrition, in the first 1,000 days weakens this foundation and leads to a range of digestive disorders in early and later life.

Balanced nutrition in pregnancy, breastfeeding and appropriate food choices in early childhood are critical to development and long-term health.

Breastfeeding, in particular, should be encouraged, wherever possible, as research suggests that the non-digestible sugars of breast milk provide a prime nutritional source for bacterial fermentation. In comparison, infants fed formula milk during their first four weeks of life demonstrate a decrease in total number of bacterial species.



ON AVERAGE 4% OF EUROPEAN CHILDREN ARE LIVING IN SEVERE FOOD INSECURITY, WHICH RISES TO 10%³² IN SOME COUNTRIES

Whilst undernutrition is not a major issue in Europe, there are concerns and regions of disparity. However, it is the negative effects of overnutrition in the form of obesity and poor nutrition due to unbalanced diets, particularly in the first 1,000 days, that is having the most significant impact upon the health of Europeans.

Understanding the importance of optimal nutrient delivery in children is critical for leaders in paediatric health and policy makers, given its implications on public health at the EU and national level.

All providers of health and care for children should advocate for healthy diets in mothers, infants and young children in the first 1,000 days. Prioritising public policies that ensure the provision of adequate nutrients and healthy eating during this crucial time would ensure that all children have an early foundation for optimal development and long-term health.

“

We are born with practically sterile guts, which are then colonised for life with the bacteria from our mothers, that stay with us for life. The first two years of childhood are critical for establishing bacterial colonisation and future gastrointestinal health. These early events may be vital in preventing IBD, irritable bowel syndrome [IBS] and other inflammatory conditions, as well as obesity.

”

Berthold Koletzko
Ludwig-Maximilians-Universität, Munich, Germany

1000 DAYS

THE FIRST 1,000 DAYS OF LIFE REPRESENTS THE BEST TIME FOR OBESITY PREVENTION AND ITS ADVERSE CONSEQUENCES³³

GUT MICROBES

Microbiome are now thought of as a virtual organ of the body as they are key to many aspects of human health, including digestive conditions and immune, metabolic and neuro-behavioural traits.

Lower bacterial diversity has been observed in people with IBD, type 1 diabetes, coeliac disease, obesity and type 2 diabetes. Consequently, diversity seems to be a generally good indicator of a healthy gut but given the variation of gut microbiota between people, the optimal diet of a person may need to be tailored to their individual gut microbiota³⁴.

Environmental factors related to diet, particularly processed foods, and medicine use, are primary determinants of microbiota composition. Research suggests that the gut microbiota may play an important and potentially causal role in the development of obesity and may be one mechanism that explains the trans-generational transmission of obesity risk³⁵. In addition, the presence of microbiota on the numerous biotic surfaces in the digestive system, and the interaction between microbes and anatomical barriers, are critical to a wide range of disease development.

There is, for example, a correlation between certain microbiota compositions and colorectal cancer and studies show that microbiota also has a role in tumour development.

Ongoing studies are beginning to identify the consortia of bacteria that is associated with tissue protection and compete with the bacteria that might promote inflammation and tumour development³⁶. In the future, the aim is to identify the specific consortia of microbiota composition in the faeces that indicate which people are at a high risk of colorectal cancer but, more importantly, can protect people from colorectal cancer.



**APPROXIMATELY 100 TRILLION
MICROORGANISMS EXIST IN THE
HUMAN GASTROINTESTINAL
TRACT³⁴**

Studies are also looking into microbiota consortia of people that do not develop colorectal cancer in order to identify and develop the next generation probiotic to protect at-risk colorectal cancer patients.

Antibiotic use is a current major health issue across the world but studies are showing that they may cause the decrease of some microbiota and

impact on their benefit in treating infection. Therefore, faecal microbiota transplantation could be very important in the fight against antibiotic resistance and, whilst it is already being used in some antibiotic resistant conditions and digestive disorders, more research is required to identify the right consortium of bacteria.



In the future, we could be looking at microbiome clinics where the microbiota of patients is assessed, whatever the disease. A treatment plan can then be developed that modulates and re-sets the microbiota with either nutrition, prebiotics, probiotics or faecal transplantation.



Hans Törnblom
University of Gothenburg, Gothenburg, Sweden
(ESNM Representative)

WHEAT-RELATED DISORDERS

Wheat-related disorders (WRD) is the umbrella term for all diseases found to be triggered by gluten. Gluten-related disorders include coeliac disease, non-coeliac gluten sensitivity and wheat allergy.

Cereals have always been recognised as a fundamental food and a central element of the highly regarded Mediterranean diet. However, some people experience health problems when consuming gluten-containing products³⁷.

The most prominent WRD is coeliac disease - a chronic inflammatory condition affecting the gastrointestinal tract - which affects more than 7 million people across Europe but only 25% of sufferers receive a clinical diagnosis³⁸. Coeliac disease occurs in genetically susceptible individuals, can begin in early childhood, affects twice as many females as males and is recognised as a significant public health burden³⁹.

The prevalence of coeliac disease varies widely in Europe⁴⁰, from 0.3% to 2.4% of populations, perhaps relating to both genetic and environmental factors. Prevalence is reported to have doubled over the last 20 years in some countries, which cannot only be explained by better detection rates.

Early diagnosis of wheat related disorders, especially in children, is essential to avoid the onset of long-term health complications such as impaired weight gain and growth problems, delayed puberty, iron deficiency, anaemia, chronic fatigue, osteoporosis and an increased risk of additional autoimmune diseases. However, with the high number of diagnosed patients, many medical experts are now urging politicians and health decision makers to initiate a single pan-European coeliac disease case finding or screening programme in order to address the diagnosis challenge and associated healthcare costs.

The primary treatment for coeliac disease is a gluten-free diet but clarity over food labelling is a key issue, with 'gluten-

free' representing <20 mg of gluten per 1 kg and 'very low gluten' applied to specialist products containing between 20 and 100 mg of gluten per 1 kg. In addition, the potential for cross-contamination in shops selling loose products and in restaurant environments creates big problems for coeliac sufferers and therefore also needs to be addressed by regulation in order to guarantee safe foods for coeliacs.



COELIAC DISEASE IS THE MOST COMMON FOOD-RELATED CHRONIC DIGESTIVE DISEASE

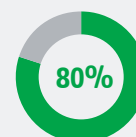


At the moment, the 'may contain' claim is not yet regulated at the European level and we urgently need clear guidelines on the use of this claim, which could improve the lives of coeliac sufferers.



Tunde Koltai
Chair of the Association of European Coeliac Societies (AOECS)

UP TO 80% OF CASES OF COELIAC DISEASE REMAIN UNDIAGNOSED IN CHILDREN⁴¹



FUNCTIONAL GI-DISORDERS AND NUTRITION

Functional GI disorders (FGIDs) are defined by a group of chronic or recurrent digestive conditions where efficient treatments are not easily identifiable. The most prevalent FGIDs are IBS, constipation and functional dyspepsia and patients often suffer from multiple FGIDs.⁴²

FGIDs are extremely common, can be disabling for patients and inflict a major social and economic burden.⁴³ The costs of treating and managing IBS in Germany alone, for example, is estimated to be over €3.2 billion per year.⁴² FGIDs are also associated with educational and occupational absenteeism.

FGIDs cannot be attributed to an identifiable structural or biochemical cause but food is associated with symptom onset or exacerbation in the majority of FGID patients. Despite this, the role of food in FGIDs remains poorly understood.⁴⁴ For this reason, diet has largely played an supplementary rather than a primary role in the management of FGID patients.

In recent years, there has been a rapid expansion in our understanding of the role of food in GI function and how food relates to GI symptoms in FGID patients. This includes the positive effects on the digestive system of ‘medical food products’ such as pro- and pre-biotics, peppermint oil, caraway seeds and certain botanical combinations.⁴⁵



THE COSTS OF TREATING AND MANAGING IBS IN GERMANY ALONE, FOR EXAMPLE, IS ESTIMATED TO BE OVER €3.2 BILLION PER YEAR⁴²



Despite the prevalence of FGIDs, there is still limited understanding of the causational role of food in the formation of the disorders. A major step forward would be to find surrogate markers of adverse food reactions caused by local immunologic or otherwise gut specific reactions. A better understanding of cause and effect from this point of view could form the basis for tailored diet advice.



Hans Törnblom

University of Gothenburg, Gothenburg, Sweden (ESNM Representative)



FGIDS ARE ASSOCIATED WITH EDUCATIONAL AND OCCUPATIONAL ABSENTEEISM

HEALTHY NUTRITION RECOMMENDATIONS

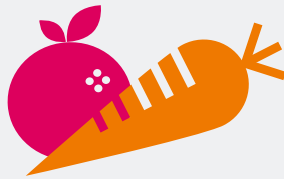
UEG, and the digestive health experts within its community, recommend a healthy diet and lifestyle for the European population in order to reduce the risk and impact of chronic digestive diseases. Healthy nutrition recommendations include:



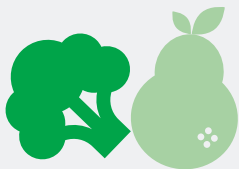
**BREASTFEEDING
IN INFANCY**



**A DIET HIGH IN FIBRE -
AT LEAST 30G/DAY OF
FIBRE FROM FOOD**



A MEDITERRANEAN-STYLE DIET, INCLUDING FISH, OLIVE OIL, FRUITS AND VEGETABLES (FROM VARIOUS COLOUR GROUPS), WHOLEGRAINS, PULSES AND CEREALS



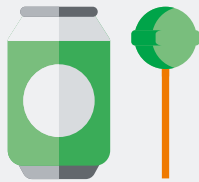
**AT LEAST 400G PER
DAY OF FRUIT AND
VEGETABLES**



**CONSUMPTION OF
FOODS RICH IN FOLIC
ACID, CALCIUM AND
VITAMIN D**

LIMITING UNHEALTHY FOODS

UEG also advise on a limited intake of processed foods, red meat and sugar sweetened drinks. Everyone should be encouraged to limit their portion sizes to reduce energy intake and follow these consumption quantities:



LESS THAN 10% (<50 GRAMS), BUT IDEALLY 5%, OF TOTAL REQUIRED DAILY ENERGY INTAKE OF SUGAR



LESS THAN 5G PER DAY OF SALT



LESS THAN 10% OF TOTAL DAILY ENERGY INTAKE OF SATURATED FATS



LESS THAN 1% OF TOTAL DAILY ENERGY INTAKE OF TRANS-FATS

A VISION FOR THE FUTURE

In order to reduce the risks, costs and societal impacts associated with digestive diseases, the European Commission and national governments need to address a range of policies and actions, including:

1. Incentives for **reducing the production of processed foods**
2. **Increased availability of healthy foods** to influence consumer choices
3. Public health and mass media **awareness** campaigns on **education** in schools of what constitutes a healthy diet
4. Promoting a **change in eating culture** from ‘on the go’ fast food consumption to nutritious cooked meals enjoyed with families, partners and individuals
5. Promotion and support of **breastfeeding in infancy**
6. The introduction of a comprehensive range of policies to **limit the availability, affordability and acceptability of fast foods**, including:
 - Policies that **restrict the marketing** of such foods, especially to **children**
 - The **taxation** of sugar-sweetened beverages
 - The **reformulation** of food products and fiscal policies to **reduce trans-fats, saturated fats and sugar content**
 - Legislation to **ban the use of industrial trans-fats**
 - Subsidies to increase the **intake of fruits and vegetables**
 - Distinct **classifications and labels** on food products to more clearly indicate **caloric and nutritional value** based upon defined **scientific targets** for intakes of specific food groups

“

Of particular current concern is the increasing prevalence of childhood obesity in Europe. Many dietary habits from childhood carry on into adulthood, so prevention should start by focusing on the nutrition and lifestyle of our children.

It is also crucial that all medical professionals increase their awareness of healthy nutrition and malnutrition. Presently, there is an incredible lack of knowledge concerning this matter, so young doctors should be educated at the earliest possible stages of their career.

Current predictions, trends and attitudes demonstrate that the challenge presented by obesity and poor nutritional choices is increasing and urgent action is required to reduce this burden and improve health outcomes in generations to come. In my opinion, prevention of nutritional issues through education is the way forward. This strategy should focus both on the general population, including those who do not yet experience nutritional problems, and in subgroups with an increased risk profile, where education could be more intensive.

”

Geert Wanten

Radboud University Medical Centre Nijmegen, Nijmegen, Netherlands (ESPEN Representative)

SUMMARY

There is an urgent requirement across Europe for a considerable change in behaviours and attitudes towards food consumption and production. This cultural shift can only be achieved through coherent EU and Member State plans and a whole-of-society approach to create environments for people and communities that are conducive to limiting the consumption and production of unhealthy foods.

The absence of globally agreed scientific targets for healthy diets and sustainable food production has hindered large-scale and coordinated efforts to transform the global food system. Governments need to combine the goals related to diet-related health, the environment and the economy and involve food producers, entrepreneurs, small- and medium-sized enterprises and big businesses in the production, distribution, trade, processing, marketing and selling of nutritious foods aligned with dietary guidelines, affordable prices and environmentally sustainable methods.

This joined approach to food production and consumption would significantly reduce the burden of diet-related ill-health leading to healthier citizens, lower healthcare costs and a more economically and socially productive population.

An unprecedented opportunity exists to develop food systems as a common thread between many international, national and business policy frameworks aiming for improved health and environmental sustainability. Establishing clear, scientific targets to guide food systems transformation is an important step in realising this opportunity.

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We need the European Commission and national governments to act now on initiatives to change the way in which we buy and consume food. However, there is the issue that policies and actions designed to alleviate ill-health often create challenges for economic interests and livelihoods and this needs to be resolved. Our aim should be to achieve a European-wide transformation to healthy diets by 2050. This would require consumption of fruits, vegetables, nuts and legumes to double, and consumption of foods such as red meat and sugar to be reduced by more than 50% over the next 30 years.

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