


BACK TO BASICS:

THE NUTRIENTS YOU NEED, SERVED ON A PLATE



Riboflavin
Vitamin A
Selenium
Copper
Cobalamin
Potassium
Iodine
Folate
Pyridoxine
Phosphorous
Chloride
DHA & EPA
Thiamin
Vitamin D

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THE QUALITY OF BRITISH DIETS HAS IMPROVED LITTLE OVER THE LAST FEW DECADES

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INTRODUCTION

Dr Carrie Ruxton, dietitian for the Health and Food Supplements Information Service - www.hsis.org

With obesity listed as a major risk factor for severe Covid-19 outcomes¹, the pandemic has brought our diet into sharper focus than ever before.

Many of us are paying more attention to what we are eating and the effect it has on our waistlines. And we are right to do so, as the nutrients we absorb from our food and our body composition (put simply, how much fat versus lean tissue we carry) significantly impact our immune status and susceptibility to infection.

However, we clearly have some work to do on our nutrient intakes. The latest data from the UK National Diet and Nutrition Survey Rolling Programme (NDNS)² and the Department for Environment, Food and Rural Affairs

(DEFRA) Family Food Survey³ reveal that the quality of British diets has improved little over the last few decades, while micronutrient status in some cases has actually got worse. In particular, declines are seen in intakes of riboflavin (vitamin B2), folate (vitamin B9), vitamin A, vitamin D, iron, calcium, magnesium, iodine, selenium and potassium.

It's often said that we can get all the nutrients we need from a balanced diet, yet this isn't easy or, for many people, achievable - especially when on a budget. For example, to reach the right intake of iron, a woman would have to eat nearly 2 kg of steamed broccoli a day. To hit the daily target for omega-3 fats - found in a spoon of cod liver oil - someone would have to eat 13 eggs or more than 11 kilos of kelp.

GROUPS OF PARTICULAR CONCERN FOR RISK OF DEFICIENCY INCLUDE:

teenagers

(girls in particular)



adult women

(especially those of childbearing age)



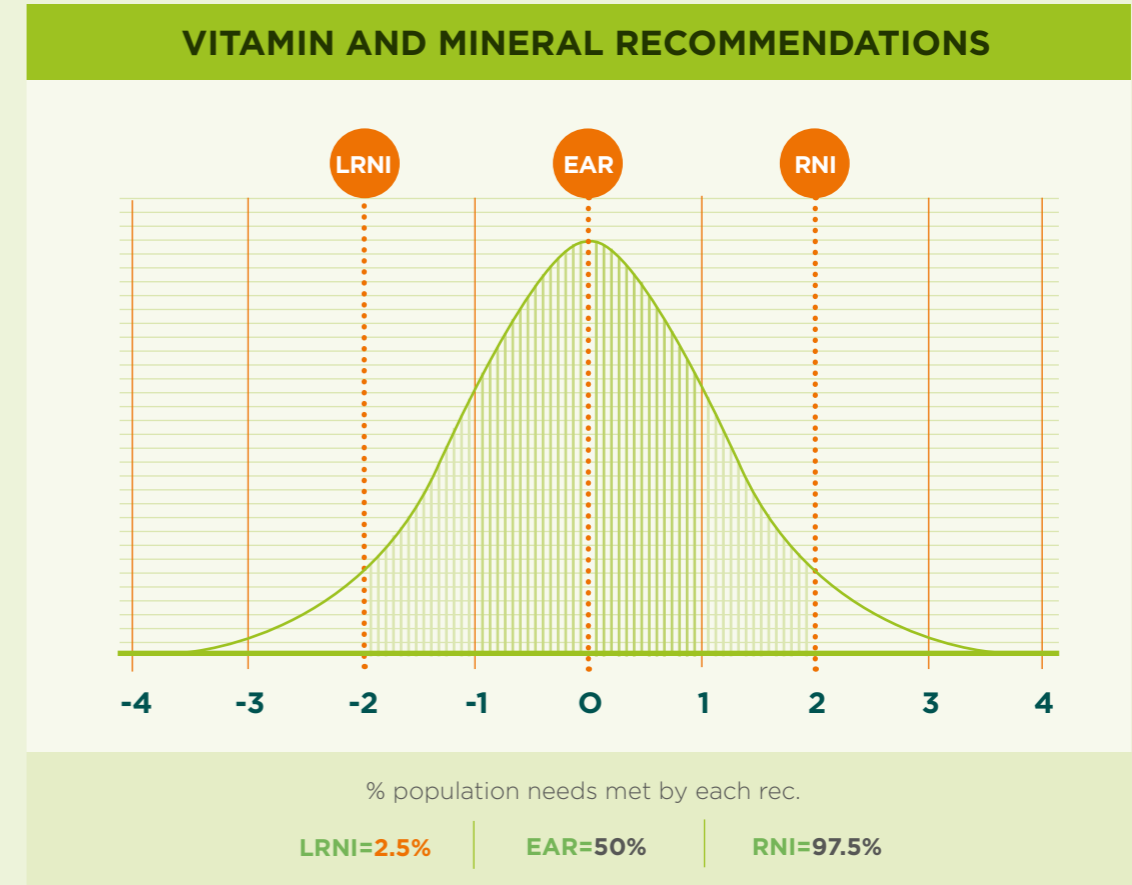
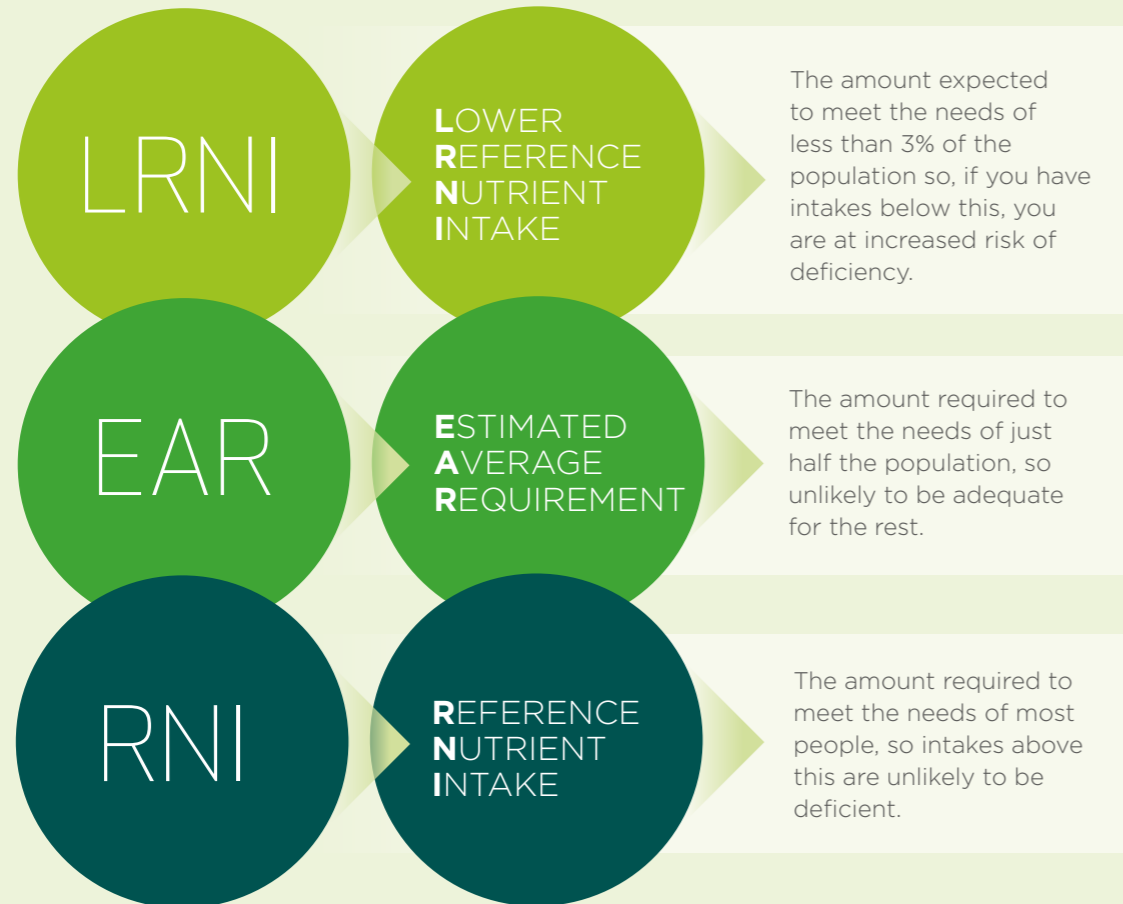
the over-65s

(many of whom are failing to meet minimum levels for health).



LRNI V RNI: BUSTING THE JARGON ON DIETARY TARGETS

We all have individual nutrition needs so UK recommendations have three different levels which differ from what we normally see on food labels – as labelling recommendations were set by Europe and brought into UK law after Brexit.



Considering the volume of dietary information we're bombarded with, it wouldn't be unreasonable to expect everyone to be clued-up on what nutrients they need. But according to a new poll commissioned by the **Health and Food Supplements Information Service** (HSIS)⁴, the opposite is true. There is a lot of confusion about what a healthy diet looks like and the importance of vitamins and minerals.

To help clear up some of that confusion, this report will take a back-to-basics look into nutrients, their benefits to our health, and what the dietary recommendations look like in terms of real food, served on a plate.



1 | NUTRIENT KNOW-HOW

Dr Carrie Ruxton

We need a wide range of vitamins and minerals to maintain health because they all serve different purposes within the body. Some micronutrients also work in combination to perform their roles, such as vitamin C boosting iron absorption⁵, and vitamin D enabling calcium absorption⁶. Here are some of the key micronutrients needed to keep the body and brain ticking over efficiently, including the dietary recommendations.

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VITAMINS

Vitamin	What it's needed for ⁷	Meets the needs of most people* ⁸	Increased deficiency below this level* ⁹
Vitamin A	Iron metabolism; maintenance of mucous membranes and skin; vision; immune function	M: 700 F: 600 (µg/day)	M: 300 F: 250 (µg/day)
Thiamin (Vitamin B1)	Energy metabolism; nervous system function; psychological function; red blood cell formation; immune function; cell division; reducing tiredness and fatigue	M: 1.0 F: 0.8 (mg/day)	M: 0.6 F: 0.4 (mg/day)
Riboflavin (Vitamin B2)	Energy metabolism; nervous system function; red blood cells; skin; vision; iron metabolism	M: 1.3 F: 1.1 (mg/day)	M: 0.8 F: 0.8 (mg/day)
Niacin (Vitamin B3)	Energy metabolism; psychological function; skin; reducing tiredness and fatigue	M: 16.5 F: 13.2 (mg/day)	M: 11.2 F: 8.5 (mg/day)

Vitamin	What it's needed for ⁷	Meets the needs of most people* ⁸	Increased deficiency below this level* ⁹
Pyridoxine (Vitamin B6)	Energy metabolism; nervous system function; psychological function; red blood cell formation; immune function; hormone regulation; reducing tiredness and fatigue	M: 1.4 F: 1.2 (mg/day)	M: 1.0 F: 0.8 (mg/day)
Folate (Vitamin B9)	Maternal tissue growth during pregnancy; blood formation; psychological function; immune function; cell division; reducing tiredness and fatigue	M: 200 F: 200** (µg/day)	M: 100 F: 100 (µg/day)
Cobalamin (Vitamin B12)	Energy metabolism; nervous system function; psychological function; red blood cell formation; immune function; cell division; reducing tiredness and fatigue	M: 1.5 F: 1.5 (µg/day)	M: 1.0 F: 1.0 (µg/day)
Vitamin C	Immune function during and after strenuous exercise; collagen formation for blood vessel function, bones, cartilage, gums, skin and teeth; psychological function; immune function; protecting cells from oxidative damage; reducing tiredness and fatigue; increasing iron absorption	M: 40 F: 40 (mg/day)	M: 10 F: 10 (mg/day)
Vitamin D	Absorption of calcium and phosphorous; regulating blood calcium levels; bone and teeth maintenance; muscle function; immune function; cell division	M: 10 F: 10*** (µg/day)	M: not provided F: not provided

MINERALS

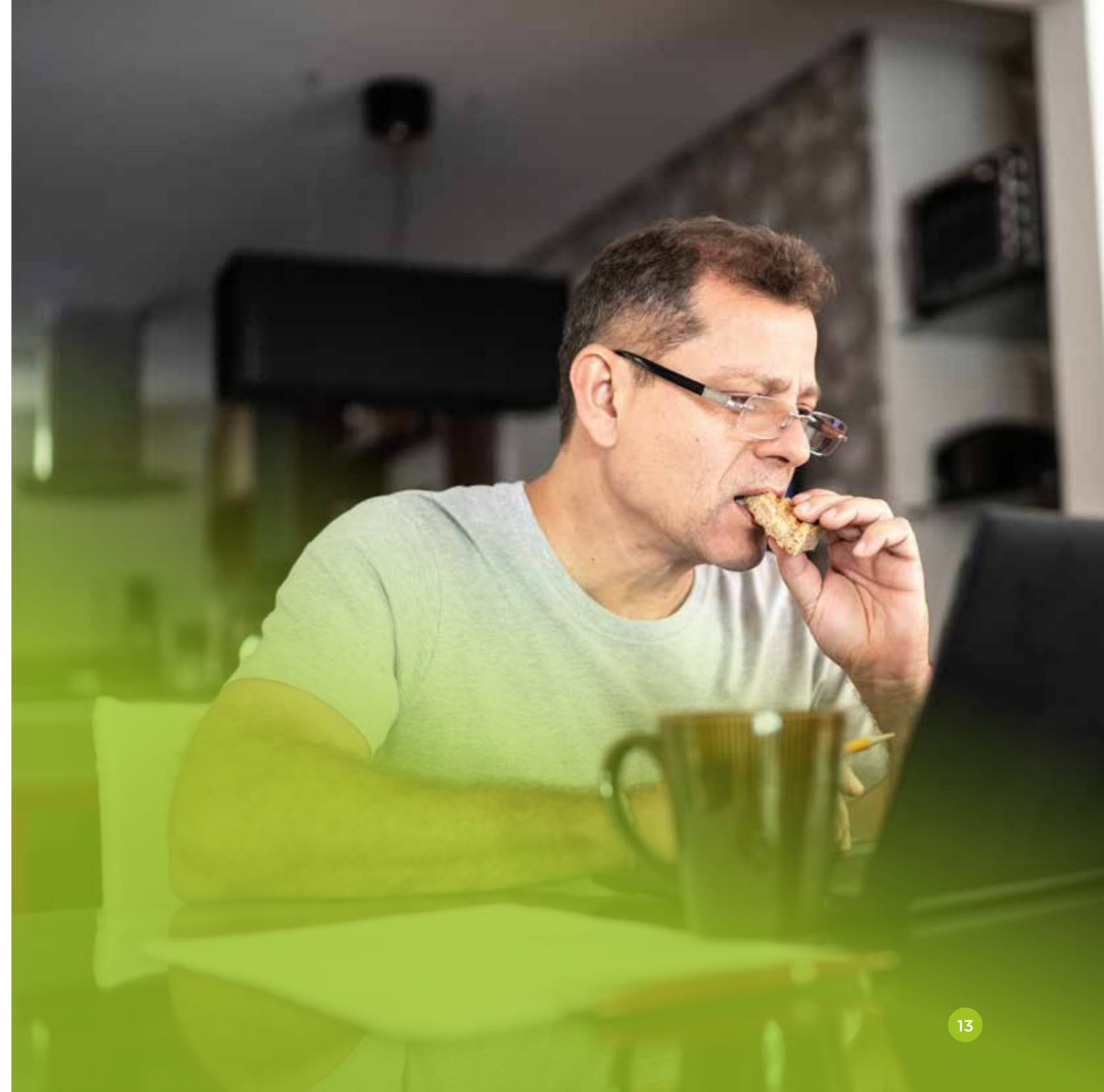
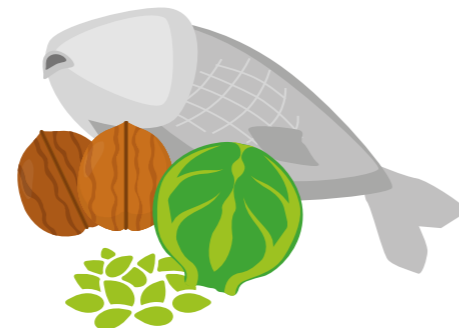
Mineral	What it's needed for	Meets the needs of most people*	Increased deficiency below this level*
Iron	Cognitive function; energy metabolism; red blood cell and haemoglobin formation; oxygen transport in the body; immune function; reducing tiredness and fatigue	M: 8.7 F: 14.8 (19-50y) 8.7 (50-64y) (mg/day)	M: 4.7 F: 8.0 (19-50yrs) 4.7 (51-64yrs) (mg/day)
Calcium	Normal blood clotting; energy metabolism; muscle function; neurotransmission; digestive enzyme function; maintenance of bones and teeth	M: 700 F: 700 (mg/day)	M: 400 F: 400 (mg/day)
Magnesium	Reducing tiredness and fatigue; electrolyte balance; energy metabolism; nervous system function; muscle function; protein synthesis; psychological function; maintenance of bones and teeth	M: 300 F: 270 (mg/day)	M: 190 F: 150 (mg/day)
Potassium	Nervous system function; muscle function; blood pressure regulation	M: 3500 F: 3500 (mg/day)	M: 2000 F: 2000 (mg/day)

Mineral	What it's needed for	Meets the needs of most people*	Increased deficiency below this level*
Zinc	DNA synthesis; balancing the body's pH; carbohydrate metabolism; cognitive function; fertility and reproduction; vitamin A metabolism; protein synthesis; bone, hair, nails and skin maintenance; testosterone regulation; vision; immune function; protecting cells from oxidative stress	M: 9.5 F: 7.0 (mg/day)	M: 5.5 F: 4.0 (mg/day)
Copper	Maintenance of connective tissue; energy metabolism; nervous system function; hair and skin pigmentation; transporting iron in the body; immune function; protecting cells from oxidative stress	M: 1.2 F: 1.2 (mg/day)	M: not provided F: not provided
Iodine	Cognitive function; energy metabolism; nervous system function; skin maintenance; thyroid hormone production and thyroid function	M: 140 F: 140 (µg/day)	M: 70 F: 70 (µg/day)
Selenium	Sperm production; maintenance of hair and nails; immune function; thyroid function; protecting cells from oxidative stress	M: 75 F: 60 (µg/day)	M: 40 F: 40 (µg/day)
Phosphorous	Energy metabolism; cell membrane function; maintenance of bones and teeth	M: 550 F: 550 (mg/day)	M: 310 F: 310 (mg/day)
Chloride	Normal digestive function through production of hydrochloric acid in the stomach	M: 2500 F: 2500 (mg/day)	M: not provided F: not provided

OMEGA-3 FATTY ACIDS

Omega-3 fatty acids	What it's needed for	Meets the needs of most people*	Increased deficiency below this level*
DHA & EPA	Regulation of blood pressure and blood triglyceride levels; heart function	M: 450 F: 450 (mg/day)	M: not provided F: not provided
DHA	Brain function; vision; visual development of infants up to 12 months; normal brain and eye development of the foetus and breastfed infant (maternal intake)	Part of DHA/ EPA guidelines	As above

- * Recommendations for adults 19-64 years old
- ** It is recommended that women of childbearing age take a daily 400µg folic acid supplement from pre-conception until the 12th week of pregnancy. This is to help prevent neural tube defects, like spina bifida, in the baby. Some women may need to take a higher dose of folic acid if they have a family history of neural tube defects, diabetes, or are taking anti-epileptic medicines.
- ** It can be difficult to get enough vitamin D from foods that naturally contain this micronutrient and/or fortified foods alone. The NHS recommends that everyone take a daily supplement of 10µg vitamin D during autumn and winter. In the summer, most people will get enough vitamin D from being out in the sun. However, supplementation will be needed all year round for vulnerable groups including those who are housebound, elderly, pregnant or breastfeeding children under five years old and people covering their skin for cultural or religious reasons.



2 STATE OF THE NATION'S DIET

GP Dr Nisa Aslam

We have seen which nutrients are needed and what they are needed for, but the question is: are people in the UK getting them in adequate quantities from their diets?

WHICH NUTRIENTS ARE ON THE WATCH LIST?

For the past 20 years, intakes of a number of key vitamins and minerals have been on the decline. These include riboflavin (vitamin B2), folate, vitamin A, vitamin D, iron, calcium and potassium, while zinc intakes appear to have improved¹⁰.

VITAMIN D:

Exposing skin to the sun (without burning) is the best way of topping up vitamin D to adequate levels. While some vitamin D is available from food, sources are limited, and the winter sun is at the wrong angle in the sky for vitamin D production. This is why Public Health England recommends that everyone take a daily 10µg vitamin D supplement from October to March¹¹.



FOLATE:

According to the NDNS, in 2014/2015 - 2015/2016¹², 15% of 11-18-year-old girls and 6% of 19-64-year-old women didn't achieve the LRNI (the level below which deficiency is more likely) for folate. In fact, 9 out of 10 women of child-bearing age have folate levels so low that if they became pregnant, their child would be at increased risk of neural tube defects, such as spina bifida.



CALCIUM:

While mean calcium intakes are above the RNI for all age/sex groups, except boys and girls aged 11 to 18 years, there has been an overall decline in calcium intakes of 20% over the last 20 years. More than a fifth (22%) of girls aged 11-18 years and more than one in ten (11%) of women aged 19 and over are not even achieving the LRNI.

“FOR THE PAST 20 YEARS, INTAKES OF A NUMBER OF KEY VITAMINS AND MINERALS HAVE BEEN ON THE DECLINE”

MAGNESIUM:

Despite observed intakes during the nine-year period remaining largely stable across the age/sex groups, the latest NDNS shows that 38% of 11-18-year-olds, 13% of 19-64-year-olds and 16% of those aged 65 and over are not meeting the LRNI for magnesium.



SELENIUM:

Selenium intakes can be dependent on how much of this mineral is found in the soil, as there can be some variation between different geographical locations. The most recent version of the NDNS suggests 26% of 11-18-year-olds, 25% of 19-64-year-olds and 36% of those aged 65 are taking in less selenium than the LRNI.



IRON:

More than half (54%) of girls aged 11-18 years and more than one in four (27%) of women aged 19-64 are not even achieving the LRNI for iron. As this is the level at which the risk of deficiency increases, these groups are placing themselves at increased risk of iron deficiency anaemia. In fact, most age/sex groups showed an average yearly decline in iron intake, with the biggest reduction (0.2mg/day) found in girls aged four to 10 years.



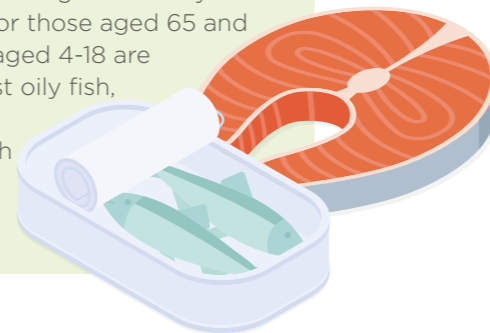
IODINE:

During the past nine years, iodine intake has been on the decline among most age/sex groups, and intakes in women are shown to be worse than intakes in men. Since the previous NDNS, the proportion of 11-18-year-old girls not achieving the LRNI has increased from 19% to 27%, and for women aged 19-64, from 9% to 15%. This is a particular concern among women of child-bearing age, given the developing foetus's requirement for iodine to support normal development of brain tissue.



OMEGA-3 FATTY ACIDS:

Oily fish is the main dietary source of omega-3 long-chain polyunsaturated fatty acids, including eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), which are key nutrients for health maintenance and disease prevention. The UK recommendation is to eat two portions of fish a week, one of which should be oily fish. Intakes haven't changed much over the past decade and remain firmly below the recommended intake of 140g a week³, at 56g for 19-64-year-olds and 84g for those aged 65 and over. Children aged 4-18 are eating the least oily fish, equating to a minuscule tenth of a portion a week⁴.



“ARE PEOPLE IN THE UK GETTING ENOUGH NUTRIENTS IN ADEQUATE QUANTITIES FROM THEIR DIETS?”



MICRONUTRIENT CHANGES SINCE 2008/9 (PER CENT BELOW LRNI)

	2008/9-2009/10				(2010/11 - 2011/12)				(2012/13 - 2013/14)				(2014/15-2015/16)				Trend			
	4-10y	11-18y	19-64y	65+y	4-10y	11-18y	19-64y	65+y	4-10y	11-18y	19-64y	65+y	4-10y	11-18y	19-64y	65+y	4-10y	11-18y	19-64y	65+y
Vitamin A (µg/d)	4	13	8	3	7	13	8	3	10	16	8	4	12	21	13	7	↓	↓	↓	↓
Riboflavin (mg/d)	0	13	7	2	1	17	10	6	0	13	8	5	1	20	10	6	↔	↓	↔	↓
Folate (µg/d)	0	4	2	1	0	4	4	1	0	4	3	3	1	9	5	3	↔	↓	↔	↓
Iron (mg/d)	0	24	11	2	2	29	13	2	2	28	14	3	2	32	15	6	↓	↓	↓	↓
Calcium (mg/d)	1	11	5	2	3	16	9	5	1	15	6	6	1	16	9	7	↔	↓	↓	↓
Magnesium (mg/d)	1	38	12	12	2	41	15	14	1	37	12	15	1	38	13	16	↔	↔	↔	↓
Potassium (mg/d)	0	23	16	13	0	26	18	14	0	24	18	17	0	28	17	19	↔	↓	↓	↓
Iodine (µg/d)	2	13	7	1	5	18	10	3	6	21	8	7	5	20	12	5	↓	↓	↓	↓
Selenium (µg/d)	1	35	38	42	1	32	38	42	2	33	36	44	1	38	36	52	↔	↔	↑	↓
Zinc (mg/d)	8	16	6	5	10	17	8	5	8	19	6	4	11	22	8	7	↔	↓	↔	↓

Data is from food sources only. ↓ Intakes have gone down. ↔ Intakes show no distinct trend; much the same. ↑ Intakes have improved.

FOOD GROUPS FALLING BY THE WAYSIDE

This inadequate micronutrient intake can be linked to some food groups of concern, which have revealed themselves over the past 20 years.

Plant power

Fruits and vegetables are key sources of essential vitamins and minerals. Dr Carrie Ruxton comments: "Despite encouragement since 2003 from the 5-a-day campaign¹⁵, fewer than a third of adults aged 19-64 (31%) manage to achieve that daily target of 5-a-day. That figure drops to just over a quarter (26%) for adults aged 65 and over, and further still to just 8% for 11-18-year-olds. Rather than increasing, the proportion of the population achieving their 5-a-day has actually decreased in the past decade¹⁶."

Red meat

Between 2008 and 2016, red meat consumption fell from 74g/day to 62g/day, which is a 16% reduction. GP Dr Gill Jenkins notes: "Red meat may have been on the receiving end of bad press due to possible links with bowel cancer¹⁷, but it's also a source of several key micronutrients in a highly bioavailable form, including zinc, iron, iodine, vitamin B12 and vitamin D. While these nutrients may be available in plant or fortified foods, they're often in a form that's much less easily absorbed by the body."

FOOD GROUPS FALLING BY THE WAYSIDE

According to one study, UK women consuming less than 40g total red meat daily are more likely to have reduced micronutrient intakes, especially zinc and vitamin D¹⁸.

WHAT'S FUELLING THESE DIETARY DEFICITS?

- A lack of time with mealtimes needing to fit around work and other activities.
- **36% say they skip meals because they're too busy, according to survey data commissioned by HSIS.**
- Allergies and intolerances, for example to gluten, lactose or yeast, which can often lead to restrictive diets.
- **More than half of UK households buy at least one 'free-from' product over a 3-month period.**
- A shift towards plant-based diets in the interests of environmental sustainability which, if poorly planned, can result in deficiencies.
- **One in eight people in the UK is now vegan or vegetarian.**
- The rise of 'fad' diets, which sometimes require the avoidance of whole food groups.
- **6% of the HSIS survey respondents had tried the cabbage soup diet**
- Confusion about what constitutes a healthy diet, due to competing information from multiple sources.
- **58% hadn't heard of Public Health England's Eatwell Guide¹⁹.**

CAN SUPPLEMENTS HELP PLUG THE GAP?

Nutritionist and health researcher Dr Pamela Mason says: "Studies from the UK and USA – which have similar types of populations – show that supplements can help to boost vitamin and mineral intakes. According to the NDNS, British adults who take supplements tend to have higher vitamin and mineral intakes and are more likely to meet nutrient recommendations compared with adults who don't take supplements²⁰."



One study from the US examined the micronutrient status of 15,030 children and adults aged over nine years²¹.

The study data came from the official national survey, the National Health and Nutrition Examination Survey (NHANES). The following nutrients were considered: vitamins A, B6, B12, C, D, E and folate. Of the three groups studied:

- those taking full-spectrum multivitamin-multimineral supplements had the lowest risk (14%) of any nutrient deficiency;
- those taking other types of dietary supplements had a 28% risk of deficiency;
- those taking no supplements at all had the highest risk of deficiency (40%).

Another US study using NHANES data examined the nutrient status of older adults (aged at least 51 years)²².

It found that those taking multivitamin and mineral supplements:

- had higher intakes and lower insufficiencies of almost all the micronutrients studied;
- had improved blood markers for folate, iodine, selenium, vitamin B6, vitamin B12 and vitamin D;

- reduced their risk of clinical vitamin B6 and vitamin D deficiency (but increased their risk of exceeding the tolerable upper intake level of folic acid) if they took supplements on at least 16 days a month. High folic acid intakes may mask vitamin B12 deficiency which is why older people are encouraged not to take too much.

While these are both American studies, UK and US populations are comparable and similar results would be expected in the UK.

Another UK study found that blood levels of vitamins A, D and E and omega-3 fatty acids tend to be higher among those taking nutrients in supplemental form²³. While

no linear association was seen between the amount taken and blood levels for vitamins A, D and E, there was a clear trend for the omega-3 fatty acids, EPA and DHA, which are difficult to obtain from foods.

Dr Pamela Mason says: "These studies emphasise the benefit of supplements for the majority of people while keeping in mind that those with existing high nutrient intakes from natural dietary sources or fortified food should avoid 'doubling up' by taking different supplements that provide the same nutrients. It is also important to follow the recommended dose stated on the label and view supplements as a means to top up the regular diet – not to replace the role of food."



3 | NUTRIENTS ON THE PLATE

Dr Carrie Ruxton

In a perfect world, we would be able to get all the nutrients we need from our food. The only exception would always be vitamin D, the majority of which comes from safe summer sun exposure, which activates vitamin D synthesis. This is why the NHS and other UK expert bodies recommend a vitamin D supplement for everyone from the age of one year from October to March²⁴.

Dr Nisa Aslam notes: "Some people may need to take a supplement for a variety of reasons. There are particular groups among the population who are at higher risk of deficiency, such as pregnant women (folic acid, vitamin D, omega-3 fatty acids), the

elderly (B vitamins, calcium, vitamin D), young children (vitamins A, C, D and iron), teenage girls (most minerals, vitamin D and omega-3 fatty acids) and those following a vegan or strict vegetarian diet (vitamin B12, vitamin D, iodine, selenium, zinc)."

VEGAN OMEGA-3

To take in adequate omega-3 from seaweed sources like kelp would require consuming it in unrealistically high quantities. Doing so could also increase iodine intake to toxic levels, harming thyroid function, and adversely affecting pregnancy²⁶.

“ THERE ARE PARTICULAR GROUPS AMONG THE POPULATION WHO ARE AT HIGHER RISK OF DEFICIENCY ”

**270mg
MAGNESIUM**

**100g (565kcal)
pumpkin seeds**
(270mg/100g; 565kcal/100g)
**100g (554kcal)
almonds**
(270mg/100g; 554kcal/100g)
**900g (729kcal)
baked beans**
(30mg/100g; 81kcal/100g)

**10µg
VITAMIN D**

**313g (448kcal) boiled
hen's eggs**
(3.2µg/100g; 143kcal/100g)
**200g (16 kcal) Portobello
Flat Mushrooms - equivalent to
3-4 large mushrooms**
5 micrograms/100g; 8 kcal/100g
**10kg (5700kcal) plain
low-fat yoghurt**
(0.1µg/100g; 57kcal/100g)

**200µg
FOLATE**

**714g (236kcal) freshly
squeezed orange juice**
(28µg/100g; 33kcal/100g)
**54g (180kcal)
bran flakes**
(367µg/100g; 333kcal/100g)
**167g (55kcal)
raw kale**
(120µg/100g; 33kcal/100g)

**700mg
CALCIUM**

**583g (268kcal)
semi-skimmed milk**
(120mg/100g; 46kcal/100g)
**660g (1432kcal)
wholemeal bread**
(106mg/100g; 217kcal/100g)
**438g (83kcal)
boiled spinach**
(160mg/100g; 19kcal/100g)

**The nutrients
and the amounts
we should all be
consuming daily
from foods²⁷**

**60µg
SELENIUM**

**24g (164kcal)
Brazil nuts**
(254Qg/100g; 683kcal/100g)
**200g (140kcal)
cooked prawns**
(30Qg/100g; 70kcal/100g)
**462g (735kcal)
cooked pasta**
(13Qg/100g; 159kcal/100g)

14.8mg IRON

**1.973kg (671kcal)
steamed broccoli**
(0.75mg/100g; 34kcal/100g)
**1.057kg (1860kcal) grilled,
lean sirloin steak**
(1.4mg/100g; 176kcal/100g)
**779g (1005kcal)
chickpeas**
(1.9mg/100g; 129kcal/100g)

**140µg
IODINE**

87g (87kcal) baked cod
(161Qg/100g; 100kcal/100g)
**467g (1943kcal)
cheddar cheese**
(30Qg/100g; 416kcal/100g)
**824g (2027kcal)
green beans**
(17Qg/100g; 246kcal/100g)

**450mg
DHA/EPA**

(LONG-CHAIN OMEGA-3S)
**21g (50kcal) grilled,
farmed salmon fillet**
(0.73g EPA; 1.4g DHA (2.13g total/100g))
(239kcal/100g)
750g (1073kcal) boiled hen's eggs
(Trace EPA; 0.06g DHA/100g)
(143kcal/100g)
11.25kg (4838kcal) kelp
(0.004g EPA; 0g DHA)
(43kcal/100g)²⁵

4

GETTING THE
BALANCE RIGHT

Dr Nisa Aslam

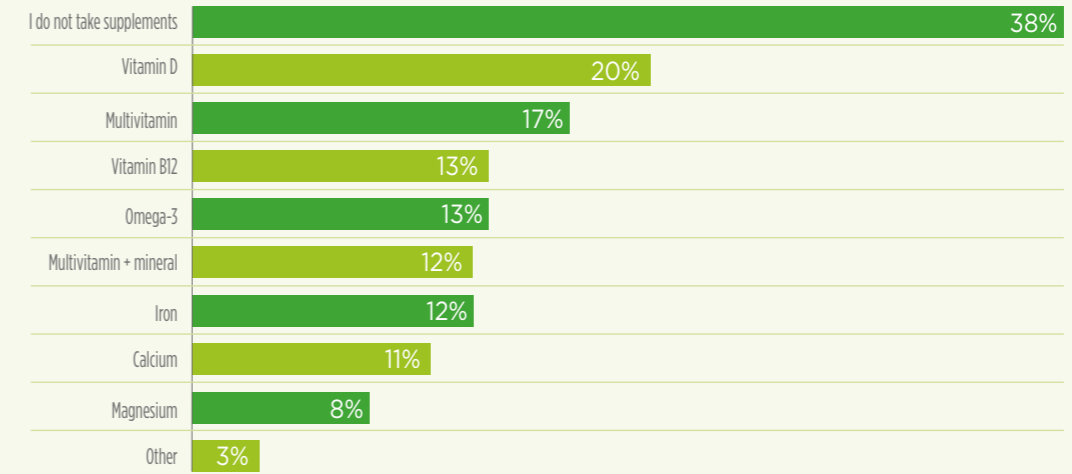
We have explored the role key micronutrients play in the maintenance of health. We've also taken a look at how the required intakes of these can be achieved through food, although the amounts required would make it impractical for most people's diets. This is where taking a regular dietary supplement can 'bridge' intakes, helping us to enjoy our diets while still safeguarding optimal intakes of nutrients.

Dr Carrie Ruxton comments: "The most important goal is for everyone to get the nutrients they need to support health and wellness, and to protect immune function in the future. While a 'food first' approach is almost always preferred when it comes to achieving the right balance of nutrients, we can't ignore the fact that this may not be practical in some circumstances."

According to the NDNS, no nutrient or important food group is without significant numbers of people failing to achieve the LRNI or target recommendation. Therefore, there is an argument for the use of dietary supplements to help achieve the required nutrient intakes. This may be in part due to changing dietary preferences, increased time pressures that leave little opportunity to cook or shop, or following diets that involve cutting out entire food groups. Perhaps linked to sustainability concerns, intakes of red meat (an important source of zinc, iron and vitamin B12) and oily fish (an important source of omega-3 fatty acids) have declined²⁸, with no signs of recovering in the near future. Fruit and vegetable intakes have also remained below the ideal 5-a-day target for more than a decade, despite plenty of advice to boost consumption.

“THERE IS AN ARGUMENT FOR THE USE OF DIETARY SUPPLEMENTS TO HELP ACHIEVE THE REQUIRED NUTRIENT INTAKES”

SUPPLEMENTS TAKEN BY RESPONDENTS IN THE HSIS STUDY



HOW MANY BRITS TAKE VITAMIN AND MINERAL SUPPLEMENTS?

- One in three (34%) takes a supplement daily
- More women (38%) than men (29%) take a daily supplement
- More than a quarter (26%) of adults have never taken supplements
- The most popular option is a multivitamin, followed by vitamin D and fish oil

WHAT'S BOOSTING SUPPLEMENT SALES?

A Mintel report commented: "With as many as half of meat-eaters believing their red meat intake should be limited, it is likely that people are looking to supplements to fill the iron gap if they reduce their usual amount of red meat. The rise in usage of calcium could also be linked to the growing focus on plant-based foods, both in terms of vegan diets and dairy avoidance²⁹."

10 HSIS TIPS

TO BRING YOUR NUTRIENT STATUS BACK TO BASICS

Supplement users have higher vitamin and mineral intakes and are more likely to achieve the RNI than those who don't take supplements³⁰. So how do we go about ensuring we get the nutritional basics right to maintain good health and nutrition? The following tips should set you off on the right path.

Dr Carrie Ruxton, Dr Nisa Aslam and pharmacist, Noel Wicks: 10 HSIS tips to bring your nutrient status Back to Basics



COOK FROM SCRATCH:

Aim to cook as much of your own food as possible, as ultra-processed meals tend to have lower levels of micronutrients and higher levels of fat, salt and sugar. Batch cooking nutritious dinners and popping them in the freezer is a great way to do this and save time in the evenings.

EATWELL:

Follow the recommendations from the Eatwell Guide³¹ to help you achieve the recommended intake of protein, fats, fibre, vitamins and minerals.

LOVE YOUR OMEGA-3S:

If you aren't managing to eat at least one portion (140g) of oily fish a week, ensure your body's omega-3 needs are being met with an omega-3 supplement containing the fatty acids EPA and DHA appropriate to your age group (applies to adults and children). There are fish-based omega-3 supplements and algae ones for vegans.



BRIDGE DIETARY GAPS:

Bridge micronutrient gaps in your diet with a multivitamin and multimineral supplement appropriate to your age group (applies to adults and children).

FRUIT AND VEG - LIFE'S VITALITY:

Aim to include at least 400g (5 x 80g portions) of vegetables and fruit in your daily diet. This could be through soups, stews or salads, or getting in a portion or two at breakfast. A daily glass of orange juice or a handful of berries sprinkled on your porridge is an easy hack. Or try spinach and mushrooms with scrambled eggs or a piece of fruit alongside your usual toast.

UP YOUR VITAMIN D:

Take a 10µg daily vitamin D supplement between October and early March to top up the limited amounts available from natural food sources (applies to adults and children).

MUMS-TO-BE:

All women of reproductive age should take a 400µg daily folic acid supplement to reduce the risk of neural tube defects in their babies should they fall pregnant at some stage.

LABEL CHECK:

Check the label of your regular supplements to make sure you're not doubling up for any individual nutrient, and that you're following the recommended doses. If you're on regular medication, it's wise to chat with your pharmacist before choosing a dietary supplement.



BABIES, INFANTS AND CHILDREN:

Consider giving children aged 6 months to five years a vitamin A, C and D supplement, as recommended by the Chief Medical Officer.

PLATE COLOUR:

Try adding a new vegetable or fruit to your basket each week. Eating a wide range of colours of fruit and veg is a good way to ensure you're maximising essential vitamins, minerals and health-giving phytonutrients, such as polyphenols.



“

SUPPLEMENT USERS HAVE HIGHER VITAMIN AND MINERAL INTAKES AND ARE MORE LIKELY TO ACHIEVE THE RNI THAN THOSE WHO DON'T TAKE SUPPLEMENTS.³⁰

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