

Nutrition through the lifespan and food poverty

‘Healthy Abingdon’

Abi Barclay-Watt

Registered Associate Nutritionist

MSc, MPhil Cantab, BSc



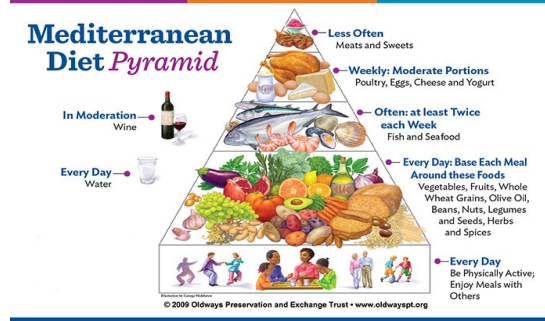
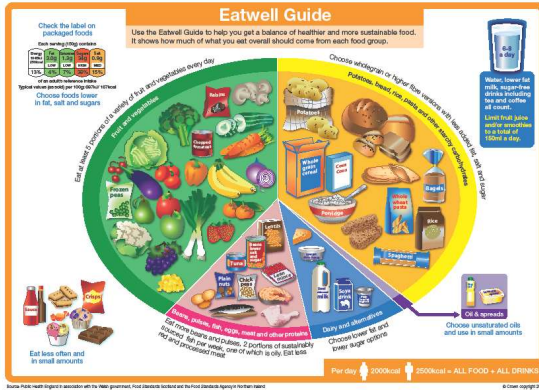
Balanced Nutrition
CONSULTANCY



Nutrition/lifespan/food poverty

- ▶ Huge topic - focus on teenage years - impact of food poverty and some solutions
- ▶ Some basic info on Balanced eating, sugar, gut health, processed foods, hydration - relevant to all life stages
- ▶ Focus on the effects of food poverty - malnutrition - under and over nutrition
- ▶ Food poverty and adolescence
- ▶ Solutions
- ▶ Questions

So what is a balanced Healthy Diet ?



Generic guides



Why are veg and fruit so important? – 2.5/day average

- Vitamins
- Minerals
- Immune system
- Fibre – gut health

Variety key

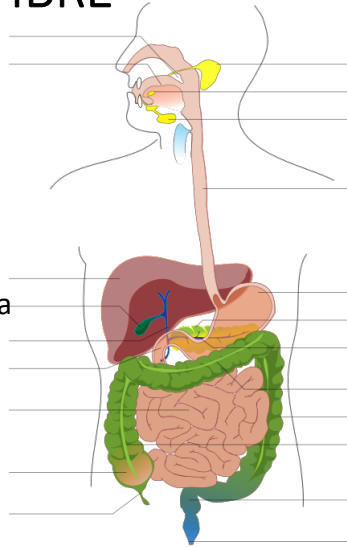


Supplements? - Bio-availability

Gut health – FIBRE

- Fibre – 25g/day!
- Variety key
- On a budget??

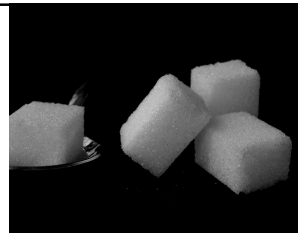
- Feed your - Microbiota



Bristol Stool Chart

- | | | |
|--------|--|---|
| Type 1 | | Separate hard lumps, like nuts (hard to pass) |
| Type 2 | | Sausage-shaped but lumpy |
| Type 3 | | Like a sausage but with cracks on its surface |
| Type 4 | | Like a sausage or snake, smooth and soft |
| Type 5 | | Soft blobs with clear-cut edges (passed easily) |
| Type 6 | | Fluffy pieces with ragged edges, a mushy stool |
| Type 7 | | Watery, no solid pieces. Entirely Liquid |

SUGAR.....is it really bad for me??



'Free sugars' 'Sometimes foods'

Empty calories
Dental health
Reduce - taste buds
Change!



WHAT ARE FREE SUGARS?

All sugars, regardless of their source.

TOTAL SUGARS

WHAT DOESN'T COUNT?
Sugars contained naturally within the cell structure of whole-foods, or lactose naturally present in milk and dairy products.

FREE SUGARS
Sugars added to food/drink.
Or found naturally in fruit juice, honey and syrups.
Fancy sugar substitutes such as date syrup, coconut sugar, agave etc. all count too!

These are sugars we generally need to eat less of as they can contribute to excess calories in our diet and tooth decay.

WHAT'S OUR DAILY FREE SUGAR LIMIT?
5% ENERGY INTAKE • -30g • -7 SUGAR CUBES

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Food and Mood

Optimal BG
Brain functions



FOOD MOOD

FOOD CAN AFFECT YOUR MOOD IN TWO WAYS

PHYSICAL INFLUENCES

FOODS YOU CHOOSE
Although low mood rarely has a single cause, your diet quality could affect your mood and increase your risk for depressive symptoms.

PSYCHOLOGICAL INFLUENCES

YOUR RELATIONSHIP WITH FOOD
The personal, cultural, religious and economic meaning of foods can influence how you feel when you eat them.

EATING TO IMPROVE YOUR MOOD

- REGULAR MEALS**: Eat regularly to provide a regular supply of energy to your brain.
- BALANCED DIET**: A balanced plate is split into 1/2 veg, 1/4 carbs (fist-sized), 1/4 protein (palm sized).
- QUALITY CARBS**: Choose quality carbs like whole-grains and potatoes and limit your intake of free sugars.
- HEALTHY FATS**: Aim for 2 portions of oily fish per week to get enough omega 3 fatty acids. E.g. Salmon, mackerel or sardines.
- STAY HYDRATED**: Dehydration can affect mood. Aim for 6-8 glasses per day.
- LIMIT ALCOHOL**: Alcohol can dehydrate you and exacerbate anxiety and low mood.

THE ROOTED PROJECT
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Processed foods – 'sometimes foods'

- Spectrum – baked beans to doughnuts
- Little nutritional value – empty calories
- Evidence increase risk processed meat products certain cancers
- Energy more 'available' in processed foods



Balance – 80:20

- Not helpful to say one food is 'good' and one 'bad'
- Your diet is a sum of all its parts
- All about balance
- Nutrient needs vary across life-stages
- Important to enjoy your food!



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What do you drink???
How much should you drink?



What about fizzy drinks?

Are the diet variety any better?

Coke and energy drinks



Nutrition, Low-income and food poverty



Food Choice: Reasons for Food Choices

- Advertising
- Availability
- **Socio-economic status**
- Emotional Comfort
- Habit
- Food Preference
- Positive Associations
- Regional Preference
- Social Pressure
- Values or Beliefs
- Weight/health
- Nutritional Value

Inequalities

- ▶ **Low-income groups** (usually measured by educational and occupational levels) consume less balanced diets and less fruit and vegetables leading to malnutrition:
 - ▶ under-nutrition (micronutrients deficiency) and
 - ▶ over-nutrition (overweight and obesity - still micronutrient deficiencies)
 - ▶ develop chronic diseases at an earlier age compared with higher socio-economic groups

Access - food poverty

- ▶ Physical factor influencing food choice - local shops/work/school
- ▶ Obesogenic environment?
- ▶ Dependent on resources such as transport (car, train, bus, by foot)
- ▶ And geographical location (easy in towns with corner shops)
- ▶ Healthy food tends to be more **expensive** when available within towns and cities compared to supermarkets on the outskirts
- ▶ BUT improving access alone does not increase purchase of additional fruit and vegetables, which are still believed to be too expensive (perception)
- ▶ EDUCATION KEY -








Food poverty and inequalities in diet

- ▶ Inequalities in diet
 - ▶ More processed foods & less variety
 - ▶ People on state benefits eat less fruit/veg, less fish, less high-fibre breakfast cereals
 - ▶ People in households without an earner consume more calories, considerably more fat, salt and Free sugars



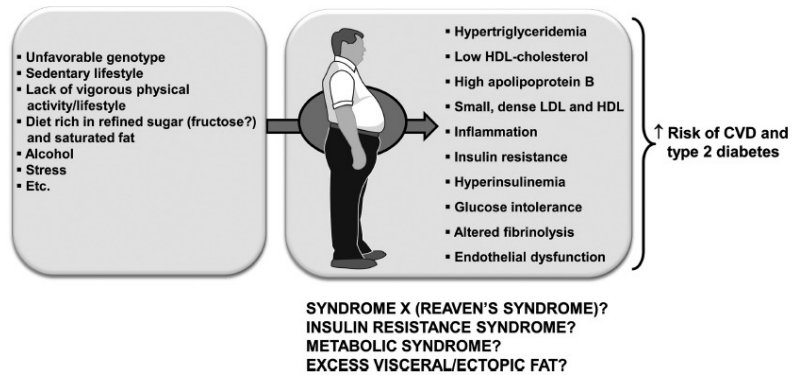
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Consequences of household food insecurity

-  Obesity in women
-  Overweight in girls
-  Lower levels of consumption of fruits & vegetables
-  Lower or fluctuating energy intakes
-  Lower intakes of some key nutrients - adolescents and older adults
-  Poor health status for children
-  Behavioural difficulties; reduced academic performance among children

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Metabolic risks related to abdominal obesity



[Deprés, J-P. (2012). Body fat distribution and risk of cardiovascular disease. An update. *Circulation* 126, 1301-13]

<http://circ.ahajournals.org/content/126/10/1301>

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Nutritional consequences of poverty

- ▶ Heart disease
- ▶ Diabetes
- ▶ Impaired Fe status
- ▶ LBW
- ▶ Lower breastfeeding rates
- ▶ Undernutrition
- ▶ Obesity - abdominal obesity
- ▶ Food insecurity
- ▶ Malnourished teenagers - tomorrows parents - SOFEA

11/04/2016

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Socio-economic status, Teens and food choices

- ▶ Higher socioeconomic background
 - ▶ More frequent vegetables and potatoes (not chips)
- ▶ Lower socioeconomic background
 - ▶ More likely to skip breakfast
 - ▶ Less frequency of healthy foods
 - ▶ Less tendency to consume healthy foods
 - ▶ More likely to consume SSB's and energy drinks



Why should teens have a balanced healthy diet and lifestyle?

Long term health – facts – obesity doubled in your age group in last 20 years – impact on your long term health – NOT ALL ABOUT WEIGHT - normal weight but unhealthy/malnourished

Links with **diet** and **lifestyle** to chronic diseases – heart disease, diabetes and certain cancers

Greatest period of growth and development - physical and mental - throughout the lifespan – peak bone mass – nutrients for bones?

Barker hypothesis – nutritional status of mother impacts future health of her children – you are the mums of tomorrow

Obesity and teens

- ▶ Young people who develop healthy eating habits are likely to maintain them in later life hereby reducing risks of chronic diseases, cancers, diabetes and osteoporosis
- ▶ In a survey that looked at 35 countries, only 30% young people ate fruits every day (WHO, 2002)
- ▶ Evidence that teens have low intakes of:
 - ▶ Fibre, Fe, Ca, iodine and more
 - ▶ for teenagers, sugary drink intake is more than double that of younger children (191g)
 - ▶ even though consumption has decreased by 30%;
 - ▶ sugary drinks remain the main source of sugar (22%)
 - ▶ On average teenagers consume 2.3 portions F&V /day
 - ▶ 8% of teenagers meet the 5 A Day recommendation for fruit and vegetables

www.gov.uk/government/statistics/ndns-results-from-years-7-and-8-combined



Nutritional facts - teenage girls 13-15 yrs

| Nutrient | RDI | Mean intake |
|-------------|---------|------------------------|
| Free sugars | <5% | 14% |
| Fibre | 25 g | 14.1 g – (boys 16.5g!) |
| Vitamin D | 10 mcg | 4.6 mcg |
| Calcium | 800 mg | 664 mg (boys 854 mg!) |
| Folate B9 | 200 mcg | 178 mcg |
| Iron | 14.8 mg | 8.3 mg |
| Iodine | 140 mcg | 101 mcg |

Barriers to change

- 3 main barriers to a balanced healthy diet include:
 - Cost
 - Accessibility - obesogenic environment/ poor choice - local shops/ work/school
 - Knowledge - nutrition and cookery - microwave cookery
- Lack of cooking facilities, nutrition & cooking knowledge result in consumption of convenience or take away foods that are energy-rich, nutrient-poor foods with direct knock on effects on health
- Perception - fruits and veg seen as expensive - education needed on tinned frozen and basic cookery skills
- Social acceptance - adolescents want to stand out amongst peer group

Want to change?
Environmental/genetic
cues – ‘wiring’

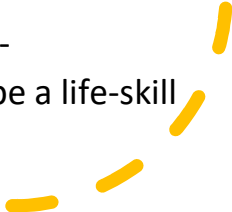


What are your food cues?
Use nudges

Genetic and lifespan influence on food choice

- Time of life does influence food choices - BUT
- Genetics also a key factor
- Different people 'wired' to respond differently to different cues
- Some will always respond more to hunger cues, or social pressures than others
- Professor Tim Yeo Cambridge university
- https://www.youtube.com/watch?v=AD_DZEh_yPk

Nutrition solutions?

- Education – key stage 2 – science week – maths, biology – life-skills
 - Level 4 teenagers supported without stigma
 - Basic cookery skills on a budget – frozen/tinned foods
 - Empowered by information not dictated
 - Sugar tax or other legislation – obesogenic environment
 - Complex area – freedom of choice – baked highly refined starch goods
 - Give tools to learn to navigate it -
 - How to nourish yourself should be a life-skill
- 

Not all about nutrition - Be more active

- PHE – 1 hr activity/ day
- Physical and mental health – bones, heart health, diabetes – depression, mental health
- Doesn't matter what it is – sustainable



Solutions

- Nutrition is key to healthy lifestyle for any community – but its not a panacea
- Other key factors, physical activity, sense of community, activities to support mental wellbeing – loneliness in the digital age
- Education for all – leading to employment
- Inequalities in accessing a 'healthy lifestyle'
- Prevention focus?

Any questions??



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www.balancednutritionconsultancy.com

@AbiBNC1

abi@balancednutritionconsultancy.com