

## Ageing Well Public Talk Series 2023/24

### Talk 8. Ways to eat well and stay well.

#### **Dr Sinéad Eccles CPsychol, SFHEA**

##### Slide 3: Ways to eat well and stay well

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- School of Psychology & Counselling, Faculty of Arts & Social Science
- 17<sup>th</sup> of April 2024

##### Slide 4: Plan for the Session

- What is intuitive eating?
- How the brain reacts to disordered or emotional eating
- The role of your brain in eating
- How to promote the production of happy hormones

##### Slide 5: Before we get started – Question time

- Have you ever dieted?
- Have you ever food restricted?
- Have you ever thought about being thinner?
- Have you ever compared yourself to you 10 years ago (or longer) or others?

##### Slide 6: The Dieter's Dilemma – 4 steps

1. The desire to be thin
2. Start the diet
3. Cravings kick in
4. It's too restrictive so you give up

##### Slide 7: The Diet Culture

- The global market for weight loss products and services have predicted to grow from \$254.9 billion in 2021 to \$377.3 billion by 2026.
- However, it is estimated that 2.7 billion adults will be overweight, over 1 billion affected by obesity, and 177 million adults severely affected by obesity by 2025.
- As a neuropsychologist that studied the biological basis of eating disorders, I am interested in the impact that restrictive eating has on the brain. I am also interested in the lack of evidence that supports diets, yet most adults will engage in diets to reduce their weight.

##### Slide 8: Anti-diet Dieticians

- There appears to be a shift.
- Health practitioners are now labelling themselves as anti-diet dieticians.
- Harrison is the author of Anti-Diet and host of the [Food Psych podcast](#) that talks about the diet culture and the impact it has had on our overall health.

##### Slide 9: Our Beautiful Brain

- My interest and passion

#### Slide 10: Brain Facts

- Your brain weighs about **3 pounds** in weight.
- **60%** of it is made up of fat. This fat is essential for your brain to work efficiently. The fatter the brain the healthier the brain
- Your brain has approx. **100 billion neurons**. (That is the same as the number of stars in the Milky way galaxy)
- Brain information's travels to **268 miles** per hour
- Your brain isn't fully formed until the age of **25**.
- The human brain will **triple its size** in the first year of life.
- **Multitasking** is impossible.

#### Slide 11: Hand Model of the Brain

- Let's practice.
- Diagram: The hand model of the brain. Daniel J. Siegel, *Mindsight* (Melbourne: Scribe, 2010), p.15

#### Slide 12: The Complex Brain

Diagram A = The three main regions of the brain

- Cerebrum: responsible for much of the complex, higher order processing that takes place in the brain.
- Cerebellum: responsible for controlling balance and movement.
- Brain stem: responsible for controlling involuntary- processes such as breathing and heart rate.

Diagram B = The four lobes of the cerebrum

- Parietal lobe: important for processing information about touch and for spatial awareness.
- Occipital lobe: primarily responsible for the processing of visual information.
- Temporal lobe: important for processing auditory information, speech, and memory.
- Frontal lobe: role in controlling movement and language. Involved in higher level cognitive skills such as reasoning and planning.

Figure courtesy of OU module material: SK298: Brain, mind, and mental health

#### Slide 13: Emotional Eating and Connection to the Brain

- People who engage in emotional eating have said to have a heightened response in their dopaminergic system, the group of nerves originating in the mid-brain which are responsible for the brain's reward system.
- Research published in 2020 in [\*Frontiers in Behavioral Science\*](#) suggests that when emotional eaters are primed with negative emotions and then eat, they think the food actually tastes better, indicating that their reward system is prone to react positively to food when they're stressed.
- Food becomes a tool for self-medication that releases dopamine in the brain, similar to what happens when someone uses a drug of abuse.

#### Slide 14:

Let's take a closer look.

- A simplified summary of the serotonergic and dopaminergic neural circuits that may contribute to depressive symptoms. Figure courtesy of OU module material: SK298: Brain, mind, and mental health.

- Dopaminergic neural circuit: (clockwise from the top) striatum, substantia nigra, hippocampus ventral tegmental area, nucleus accumbens, prefrontal cortex.
- Dopamine pathway functions: reward (motivation), pleasure, euphoria, motor function (fine tuning).
- Serotonergic neural circuit: (clockwise from the top) basil ganglia, thalamus, cerebellum, raphe nuclei, hippocampus, temporal lobe, amygdala, hypothalamus, prefrontal cortex.
- Serotonin pathway functions: mood, memory processing, sleep, cognition.

#### Slide 15: What happens to the brain when you restrict food?

- Studies that assess attentional focus and attentional capture with eye tracking methods (Castellanos et al., 2009), the attentional blink paradigm (Piech, Pastorino, & Zald, 2010), or dot probe tasks (Placanica, Faunce, & Soames Job, 2002) find that people's attention is biased toward food stimuli when they are calorie deprived.
- Brain imaging studies find increased activity in areas relevant for attention when calorie deprived individuals are shown images of palatable foods (compared to images of water or non-palatable foods; Stice, Burger, & Yokum, 2013).

#### Slide 16: What is intuitive eating?

- Intuitive eating involves developing a connection with one's own internal cues of hunger, fullness, and satisfaction and using those cues to guide food and exercise choices (Bruce & Ricciardelli, 2016; Tribole & Resch, 2012).
- Intuitive eating recognizes that individuals experience unique needs around food, arguing that people connected with their internal hunger cues will naturally make food and exercise choices that promote health (Tribole & Resch, 2012).

#### Slide 17: Food Police

- Did you know that there are no good and bad foods!
- There are only foods that can nourish you and make you feel better!
- However, what you can eat can influence your mood, energy levels, concentration and how we respond to life events. Regular eating patterns can really help with this.
- If we wait until we are very hungry, we are almost guaranteed not to make the best choices that will nourish our bodies. So, take some time to plan some meals, even if this is your daily evening meal and make sure to have all the ingredients that you need.

#### Slide 18: How can you apply intuitive eating?

- Reject the diet mentality.
- Recognise your Hunger.
- Make peace with food.
- Challenge the food police (labelling food as good or bad)
- Feel your fullness.
- Discover the satisfaction factor.
- Cope with feelings without using food.
- Respect your body.
- Exercise and feel the difference.
- Honour your health.
- [What is intuitive eating? - Heart Matters magazine | BHF](#)

#### Slide 19: Intuitive Eating: How to get started

##### **Plan**

- Plan to prioritise your own health. Start small, from a place of kindness and acceptance.

### Resist

- Resist from starting another diet. Be curious as to what your triggers are.

### Read

- Read material on Intuitive eating- Also, [Read the article on Brain health](#) (this will help you along the way)

### Celebrate

- Celebrate your body, you are unique and wonderful.

### Keep

- Keep a food journal and write about what time you eat, what you eat and how you felt before and after you eat. Don't feel guilty!! Remember no good and bad foods!

### Slide 20: But wait!

- To eat intuitively you need to get your brain to work for you.
- Your brain can really help you along the way.
- A happy brain will be more open to eating intuitively.

### Slide 21: Happy Hormones - DOSE

Technically a neurotransmitter that makes us feel good.

Neurotransmitters are chemical messengers that your body can function without.

- DOSE - Dopamine - Oxytocin – Serotonin - Endorphins
- Dopamine: known as the 'feel-good' hormone, dopamine is responsible for motivation and drive. It's also involved in the reward system of your brain and plays a role in controlling memory, movement, mood, sleep and much more.
- Oxytocin: this hormone is known as the 'love hormone' or the 'cuddle chemical'. It is essential for the bonding between a parent and child. It can also help promote trust, empathy, and bonding in relationships. This hormone will increase with physical affection, such as a hug.

### Slide 22: Happy Hormones – DOSE (continued)

- Serotonin: [this hormone](#) is known as the 'happy chemical' that helps to stabilise your mood. 90% of it is made in your gut so when you feel anxious or stressed serotonin will increase in an attempt to help regulate your emotions. It's also involved in your sleep, appetite, digestion, and memory.
- Endorphins: [the name comes from the words 'endogenous,' which means within the body, and 'morphine,' an opiate pain reliever. Endorphins are your body's natural pain reliever and increase](#) when you engage in reward-producing activities such as eating, working out, or laughing.

### Slide 23: What are the signs you are not getting enough happy chemicals?

#### Dopamine

- Procrastination
- Low self-esteem
- Lack of motivation
- Low energy or fatigue
- Inability to focus
- Feeling anxious
- Feeling hopeless
- Mood swings

### **Oxytocin**

- Feeling lonely
- Feeling stressed
- Lack of motivation
- Low energy or fatigue
- Disconnect of relationships
- Feeling anxious
- Insomnia

### **Serotonin**

- Low self-esteem
- Overly sensitive
- Anxiety / panic attacks
- Mood swings
- Feeling hopeless
- Social phobia
- Obsession / compulsion
- Insomnia

### **Endorphins**

- Anxiety
- Depression
- Mood swings
- Aches and pains
- Insomnia
- Impulsive behaviour

### Slide 24: Happy hormones and eating

- Keep yourself happy and focus on your happy hormones. Your brain will make these for free.
- Remember Dopamine is a very useful but tricky hormone.
- Connect with your body and brain when you eat.

### Slide 25: How can you increase your happy hormones?

#### **Dopamine**

- Completing a task
- Doing self-care activities
- Eating food
- Celebrating little wins

#### **Oxytocin**

- Playing with a dog
- Playing with a baby
- Holding someone's hand
- Hugging your family
- Giving a compliment

#### **Serotonin**

- Meditation
- Running
- Sun exposure

- Walk in nature
- Swimming
- Cycling

#### Endorphins

- Laughter exercise
- Essential oils
- Watch a comedy
- Dark chocolate
- Exercising

Slide 26:

- What makes you happy?

Slide 27: Interactive Brain

- Interactive brain courtesy of the OU [The Open Science Laboratory: Interactive 3D brain](#)

Slide 28: Questions

- [Intuitive Eating Open Learn Article](#)
- [Brain Health Open Learn Article](#)
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Slide 29: Thank you

Slide 30: The Open University Ireland

Slide 31:

- Ageing Well series of Public Talks
- “Being mindful of eating well, hydration, physical activity, learning new things and social connections can delay the decline caused by ageing. Come and join us for the series of public talks with the title Ageing Well”

Slide 32: Summary of related resources to The Ageing Well Public Talk Series

- Podcasts
- Vseteckova J & King J (2020) COVID-19 Interview podcast for The Retirement Café: [‘Ageing Well Under Lockdown’](#)
- Vseteckova J & Broad E (2020) Podcast – Open University & The Parks Trust [Keep Me Walking - researching with people living with dementia and their carers](#) –
- Vseteckova J (2020) Podcast - [Areas of research with The Open University](#)
- Broad E, Methley A & Vseteckova J (2021) Podcast OU & The Parks Trust & Northamptonshire Healthcare NHS Foundation Trust - [Spotter sheet and mindful walking](#).

- Vseteckova J, Methley A, Broad E (2021) Podcast OU & The Parks Trust & Northamptonshire Healthcare NHS Foundation Trust [Preventing brain decline while ageing](#)

Slide 33:

- Methley A, Broad E, Vseteckova J (2021) Podcast OU & The Parks Trust & Northamptonshire Healthcare NHS Foundation Trust [Walking therapy](#)
- Vseteckova J, Methley A, Broad (2021) Podcast OU & The Parks Trust & Northamptonshire Healthcare NHS Foundation Trust [Understanding our memory](#)
- Araya Y, Broad E, Vseteckova J (2022) [Engaging with our environment](#)
- Joannidi H, Araya Y, Broad E & Vseteckova J (2022) [Sense of self during aging: how mindfulness and nature can help](#)
- The above podcasts can be also seen on [The Parks Trust YouTube Channel](#)

Slide 34:

- Vseteckova J (2020) [Ageing Well Public Talks Series](#)
- Vseteckova J (2019) [5 reasons why exercising outdoors is great for people who have dementia](#)
- Vseteckova J (2019) [Depression, mood and exercise](#)
- Vseteckova J (2019) [Five Pillars for Ageing Well](#)
- Vseteckova J (2020) [Ageing Brain](#)

Slide 35:

- Vseteckova J (2022) [Pharmacotherapy while ageing](#)
- Joannidi H, Araya Y, Broad E & Vseteckova J (2022) [Sense of Self during ageing – how mindfulness and nature can help](#)
- Mehta S (2022) [Medicines and personalisation while ageing](#)
- Gale B (2022) [How can we prepare for death while ageing?](#)
- Gale B (2022) [Valuing death at home: making preparations](#)

Slide 36:

- Methley A & Vseteckova J & Jones K (2020) [Green & Blue & Outdoor spaces](#)
- Vseteckova J, Borgstrom E, Whitehouse A, Kent A, Hart A (2021) [Advance Care Planning \(ACP\)](#)
- Vseteckova J (2020) [Walking the Parks with The OU and The Parks Trust](#)
- Vseteckova J, Methley A, Broad E (2021) [Understanding our memory](#)
- Araya Y, Broad E, Vseteckova J (2022) [Engaging with our environment](#)

Slide 37: Care and caring related

- Vseteckova J, (2020) [How to age well, while self-isolating](#)
- Vseteckova J, (2020) [SHORT FILM - Ageing Well in Self-Isolation](#)
- Vseteckova J, (2020) [ANIMATION - Keeping healthy in Self-Isolation](#)
- Vseteckova J et al (2020)
- [COVID-19 The effects of self-isolation and lack of physical activity on carers](#)
- Taverner P, Larkin M, Vseteckova J, et al. (2020) [Supporting adult carers during COVID-19 pandemic](#)

Slide 38:

- Robb M, Penson M, Vseteckova J, et al. (2020) [Young carers, COVID-19 and physical activity](#)

- Penson M, Vseteckova J et al. (2020) [Older Carers, COVID-19 and Physical Activity](#)
- Vseteckova J & Methley A (2020) [Acceptance Commitment Therapy \(ACT\) to help carers in challenging COVID-19 times](#)

Slide 39:

- AGEING WELL PUBLIC TALK SERIES WEBSITE
- [Ageing Well Public Talks' Series 2023/2024](#) repository on ORDO Collections
- ['Ageing Well Public Talks' Series 2022/2023](#) repository on ORDO Collections
- ['Ageing Well Public Talks' Series 2021/2022](#) repository on ORDO Collections
- ['Ageing Well Public Talks' Series 2020/2021](#) repository on ORDO Collections
- ['Ageing Well Public Talks' Series 2019/2020](#) repository on ORDO Collections
- [Midlife MOT OpenLearn Course](#)
- OpenLearnCreate Course on ['Ageing Well' 2019/2020](#)
- [Home exercise no equipment – no problem](#) *Blog*