Bridin McKenna
Director, Life Therapies Clinic

#TOXIC16

In collaboration with and supported by

CiNI
Children in Northern Ireland

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Children & Young People's Strategic Partnership

Armagh City Banbridge & Craigavon Borough Council
Food and Mood for Mental Health
Bridin McKenna: Psychotherapist and Eating Disorder Clinician

Welcome to the Toxic Childhood Conference
Looking at how some children and parents have become addicted to modern day technology and unhealthy food.

20th October 2016
Client as an individual

- Each person’s physical make-up is unique and, beyond basic exploration and signposting, a therapist should be suitably qualified if they intend to undertake specific work around dietary supplementation.
- Some have called for a multidisciplinary approach to mental health, or a ‘triadic relationship’ of client, psychological therapist and dietary practitioner.
- Compiling a referral list of suitable practitioners might be a step toward this.
- Awareness of their body and mind’s responses to their dietary lifestyle may empower clients to develop a better degree of control over their health and emotional wellbeing.
- Our relationships with food are just as complex and multi-layered as any of the other meaningful relationships in our lives.
Aims of Nutritional Approaches

- Rebalance physiology and biochemistry
- Develop organised healthy eating patterns
- Provide appropriate, safe nutrition information.
- Help client understand behaviours and symptoms linked to diet
- Support psychological treatment
- Understanding nutrition in context of health
- Nutrition education- facts and information
- Providing information re physiology/biology
- Developing food plans and making choices
- Practising appropriate food and self care behaviours
- Nutritional approaches for mental health
Key Neurotransmitters

- **Adrenaline**: ‘motivator’, stimulating, aids stress response
- **Dopamine & Noradrenaline**: ‘feel-good’, energising and giving control
- **Endorphins**: promote ‘bliss’ and sense of euphoria. Brains natural opiates
- **GABA**: ‘cool’, relaxing and calming
- **Serotonin**: ‘happy’, improves mood
- **Acetylcholine**: ‘brainy’, improves memory and mental alertness
What is Serotonin?

- Serotonin is a neurotransmitter - a chemical that carries vital signals from one cell to the next.
- Found in the gastro-intestinal tract where it helps regulate the secretion of stomach acid and other digestive fluids.
- Most well-known role is in brain chemistry where it influences a wide range of functions.
- Works as a kind of master control chemical governing the activities of many other neurotransmitters.
- Influences mood, pain transmission, sexual behaviour and sleep.
- Most important functions is to control appetite through the ‘satiety mechanism’ and puts the brake on food intake by signaling to the brain when the body has eaten sufficient food.

![Chemical Reaction Diagram](image-url)
Serotonin Deficiency Issues

- Can only be manufactured inside the brain.
- Made from the essential amino acid tryptophan: requires a number of co-factors, nutrients particularly: B vitamins, Magnesium, Vitamin C, Iron and Chromium.
- Tryptophan is found in milk, cottage cheese, poultry, turkey and chicken, eggs, red meats, soybeans, tofu and nuts especially almonds.
- Merely eating a diet high in these foods, will not necessarily increase levels of serotonin in the brain.
- Poor diet and eating habits mean that we do not provide our bodies with the raw materials needed to produce neurotransmitters.
- Physical and emotional stress and our coping patterns mean that the body constantly needs to adjust its chemical balance to deal with stress.
Reasons for Neurotransmitter Deficiencies

• Inherited deficiencies
• Prolonged stress
• Too little protein
• Seasons/time of year
• Lack of exercise
• Lack of co-factor nutrients
Symptoms of Nutritional Deficiency - Link to Mental Health Symptoms

- Low energy
- High stress
- Slow metabolism
- Food cravings
- Constipation
- Weight changes
- Insomnia
- Headaches
- Anxiety
- Low mood/mood swings
- Lack of concentration
- Obsessions/compulsions
- Low self esteem
- Depression
- Irritability
- Decreased sexual interest
Stress and the Adrenals

• Stress may be defined as 'our response to the perceived relationship between the demands on us and our ability to cope'.
• Not all stress is unhealthy - the impact on our health depends on our perception of our ability to cope.
• 3 Stages of stress; General Adaptive Syndrome (GAS) on body;
  1) Alarm stage; ‘fight or flight’ or ‘initial response’ - short term stress
  2) Adaptation or resistance stage – impact of stress over longer term
  3) Exhaustion stage
• Adrenal hormone production in the various stages of stress
• Effects of these hormones in the body including symptoms an individual might experience
• Possible outcomes for the individual at each stage
• Likely adrenal status at each stage.
Other impacts of Stress

- **Serotonin production**: stress reduces the amount of serotonin manufactured in the body.
- **Nutrient deficiency**: Long term stress drains key nutrients required to produce energy.
- **Dieting and disordered eating**: dieting, or alternating between dieting and overeating, also puts a strain on the adrenals as dieters are frequently in a state of low blood sugar.
- **Adrenal Fatigue**: the production of cortisol and DHEA by the adrenals may be compromised resulting in 'adrenal fatigue'.
- **Identifying long term effects of stress**: A nutritional therapist is qualified to use a range of tests and indicators to help identify the long-term effects of stress in an individual.
- **Blood sugar control**: prime function of the adrenal glands is to deal with 'slumps' in blood sugar by releasing adrenaline.
- **Immune system**: under stress, the immune system is also affected.
Re-establishing Balance

• Nutritional approaches can help individuals to cope more effectively with overload from stress, but cannot take the place of an honest assessment of life and any realities that may need to be eliminated or handled more constructively.

• A programme that includes changes to diet and lifestyle should help to reduce the impact of long-term stress on the body's systems, but it is important to include both aspects in the programme.

• Dietary changes are unlikely to help if the individual does not also look at changing aspects of their lifestyle.

• MUST be created for individual clients particular situation.

• Helpful to identify which stage of long-term stress they are in through questioning, and/or working with a specialist practitioner.

• Overall strategy should be aimed at strengthening adrenal function to help rebalance all the body's systems.
What works

Ensuring a nutrient-dense diet in particular to balance blood sugar, support the immune system, digestion and detoxification control. This would include:

✓ Complex carbohydrates, vegetables and fruit (providing nutrients for blood sugar control, serotonin production, immune support, enzyme production and fibre).
✓ Plenty of water, herb tea
✓ Oily fish, nuts and seeds (providing essential fats to help hormone balance).
✓ Protein from vegetarian sources and small amounts of organic poultry.
✓ Protein is needed for tissue repair and blood sugar control. Vegetable protein reduces the acidic load on the body. 20 grams of protein, 3x/day helps to increase energy and support cortisol production.
✓ Avoiding tea, coffee, sugar and all stimulants including tobacco, alcohol and chocolate (re blood sugar balance and leaky gut).
✓ Eating regular meals particularly breakfast (ideally 3 meals and 2 healthy snacks per day). This approach supports blood sugar control and helps to sustain energy.
✓ Eliminating as many causes of dietary stress on the body as possible.
How to Be Your Own Brain Fitness Coach

I. Debunk Myths

1. Understand how the brain works, how it impacts work and life.

II. Address Basics

2. Healthy Nutrition

3. Aerobic Exercise

4. Stress Management

5. Mental Stimulation

III. Cross-train your Brain

6. With Meditation

7. With Reframing

8. With Biofeedback

IV. Coach Yourself

9. With Cognitive Training

10. To Self-Monitor

11. To Prioritize Options

12. To Develop, Implement and Iterate your Own Plan

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The importance of Blood Sugar Balance

When food is consumed, all the carbohydrates, proteins, and fats are digested into simple sugars, such as glucose, amino acids, and free fatty acids.

When glucose is first absorbed from the gut, blood glucose levels rise. These nutrients are then delivered from the bloodstream to organs and tissues.

As time passes, the blood glucose levels start to drop. The brain is critically dependent on glucose. And if blood glucose levels fall far enough, the brain perceives it as a life-threatening situation.

Lower blood glucose levels can make it harder to concentrate and do simple tasks.

Hunger, anger, and hormones

How hormones can make you hangry

If your blood glucose levels fall past a certain threshold, the brain sends instructions to several organs to synthesise and release hormones that increase the amount of glucose in the bloodstream.

The pituitary gland, located in the brain, produces growth hormone.

The pancreas produces glucagon.

The adrenal glands produce adrenaline and cortisol.

Both adrenaline and cortisol are stress hormones that are also released in stressful situations.

Adrenaline produces "fight-or-flight" responses in humans and other animals.
SUGAR ADDICTION: THE PERPETUAL CYCLE

1. YOU EAT SUGAR
   - You like it, you crave it
   - It has addictive properties

2. BLOOD SUGAR LEVELS SPIKE
   - Dopamine is released in the brain = addiction
   - Mass insulin secreted to drop blood sugar levels

3. BLOOD SUGAR LEVELS FALL RAPIDLY
   - High insulin levels cause immediate fat storage
   - Body craves the lost sugar 'high'

4. HUNGER & CRAVINGS
   - Low blood sugar levels cause increased appetite and cravings
   - Thus the cycle is repeated

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‘Health Foods’ that are really Junk Foods in Disguise

❌ Processed “Low-Fat” and “Fat-Free” Foods
❌ Most commercial salad dressings
❌ Fruit juices, which are basically Just liquid sugar
❌ “Heart Healthy” whole wheat
❌ Cholesterol lowering Phytosterols
❌ Margarine
❌ Sports drinks

❌ Low-carb junk foods
❌ Agave Nectar
❌ Vegan Junk foods
❌ Brown rice syrup
❌ Processed organic foods
❌ Vegetable oils
❌ Gluten-free junk foods
❌ Most processed breakfast cereals
Nutritional Strategy – General Guidelines

• Three balanced meals a day
• Emphasise nutrient dense food foods to improve nutritional/biochemical imbalance
• Have 2-3 small snacks daily avoiding sweets or refined carbs
• Treat food as medicine
• Eat at least every 2-3 hours
• Ensure good quality protein with main meals
• Include some EFAs each day
• Eat unlimited amounts of green vegetables plus some red, orange, purple and yellow vegetables.
Services for Children/Adolescents at Life Therapies Clinic

2. Childhood Obesity Services and Launch of schools Programme 2017
3. Holistic Dentistry and Holistic G.P/Medical Services
6. Tappy Twins Schools Counselling Service with free social media and website support: [http://www.tappytwins.com/](http://www.tappytwins.com/)
7. Teenline Helpline with peer group support:
Thank you for listening
Please check out our website and see what we can offer
www.life-therapies.com