# The current research needs for the diet component of diet and ADHD

Symposium on Dietetic Research in Adverse Food Reactions

ICD Sept 2012

### Joan Breakey

M App Sc B Sc DNFS Cert Diet TTTC

### Background

- Background: A 2012 State-of-the-Art Review article recommends just a healthy diet for treatment of attention deficit hyperactivity disorder (ADHD)
- However there is sufficient research available to say an elimination diet has a role in some of children with ADHD
- Diet factors "aggravate the underlying disorder in susceptible people"

### Diet effect for all responders

- Poor concentration 1.5
- Impulsivity 1.5
- Restlessness 1.4
- Irritability 1.7
- Not settling 0.9
- Excitable 1.2

- Poor attention 1.1
- Uncontrollable 1.3
- Hyperactivity 0.8
- Demanding 1.4
- Restless sleep 1.0
- Argumentative 1.4
- Difficult to reason with 1.5 Tantrums 1.3 [See thesis for detail]

### My aim

- To contribute to diet and ADHD thinking
- This symposium has been most about allergy this presentation is about food chemical intolerance
- It is about **adverse reactions** that are not allergic reactions
- The focus is on individuals and foods they react to - not one diet for ADHD

#### Method

- For this study quantitative and qualitative research with emphasis on the diet therapy practice from 1974 to 2012 was investigated
- Research shows diet has a role in some
- Practice (diet investigation process) is known
- Initial diet options are available
- Clinical research has provided most -
- which diet, which children, what changed.....

#### Results

- Results: The diets used in research range from a strict few foods diet to the low chemical diets, and the Feingold Diet
- The first gap is the lack of clarification of which of the various diets is best for screening, depending on age, sensitivity, motivation, and symptom severity

## Dietitians can fill the gap via an individualised initial diet

- Dietitian uses
- Reactions the person reports as suspect
- Family Sensitivity History info from all family
- Any allergy tests
- Additional info re smells eg of stale foods, strong spices, mint, perfumes,
- Foods strongly disliked

### Foods to keep – dietitian decides

- There is a place for reduction of suspect foods to avoid complete exclusion e.g limited well cooked crusty or toasted bread or dry biscuits
- Useful low chemical foods providing nutrition canned tuna, cornflakes, peanut butter
- Replacement of favoured foods with others use home-made gravy or allowed chutney
- Older kid can manage low risk foods

### Second gap – lack of cause

- The lack of a single well defined cause prevents knowledge of likely diet responders
- Only some respond
- There are no tests of a physiological difference
- The Family Sensitivity History, developed from clinical findings, provides a tool for dietitians to collect data on responders so fill the gap

### Much can be learned from the Family Sensitivity History (FSH)

- Food sensitivity runs in families
- Tendency is probably genetic
- FSH shows the variety of symptoms in three generations – these clusters of symptoms are less present in those with lifestyle disorders
- "There is something about these families"
- FSH shows all the suspect foods, inhalants, smells, that family members suspect

#### The Family Sensitivity History

• Symptoms may be ADD, ADHD, behavioural, mood, sleep, physical symptoms e.g. eczema, hives, rashes, anaphylaxis, dermatitis, headaches, migraine, hay fever, sinus, ear aches, asthma, tummy aches, gut pain, wind, diarrhoea, constipation, reflux, irritable bowel syndrome, mouth ulcers, limb pains, depression. Include any of the above symptoms in any family members.

Suspect substances Write in anything that may be suspect. It can include whole foods, additives, inhalants, contacts, smells, medicines, infections, stress etc.

- Don't forget to include symptoms that occurred in infancy too. Note fussiness of any kind as well.
  - Also note if any family member is sensitive to aspirin.

| • | It does not matter if you do not have much before the first appointment, just what you can get easily. |          |                    |
|---|--|----------|--------------------|
|   | Family member  | Symptoms | Suspect substances |
| • | First family member [Member investigating diet]  |          |                    |
| • | Brothers   |          |                    |
| • | Sisters  |          |                    |
| • | Mother   |          |                    |
| • | Aunts  |          |                    |
| • | Uncles   |          |                    |
| • | Maternal grand-<br>mother  |          |                    |
| • | Maternal grand-<br>Father  |          |                    |
| • | Father   |          |                    |
| • | Aunts  |          |                    |
| • | Uncles   |          |                    |
| • | Paternal grand-<br>Mother  |          |                    |
| • | Paternal grand-<br>mother  |          |                    |

## Third gap - data on individual variation

- Research has shown that the foods which cause most reactions include some additives, natural chemicals and whole foods
- Individuals differ in what causes reactions
- Dietitians can fill the gap by collating clinical findings on individual variation
- The diet is in the person not in the diagnosis

# Collate data on individual variation – hurdles for dietitians and patients!

- Note slide below 80% react to chocolate etc
- Need to accept each patient gets to their own best diet – this takes 3 months
- Family Baseline Diet is the beginning –
   individual food challenges provide the diet
- Individual tolerance changes over time

### The Total Body Load matters

- The Total Body Load is the load of all that can contribute to the threshold for a reaction
- It includes suspect whole foods, inhalants, additives, smells eg strong in food, or stale, or in environment, ageing in food, seasons, hormone changes, infections, sensoty input, stress, age.
- Individuals vary in what they need to attend to

# Fourth gap – which foods cause most reactions

- Dietitians can fill that gap by collecting data on what patients report reactions to
- This is research into adverse reactions, so we need to shift - to - dietitian applied-research clinical findings
- Progress from narrow double-blind-placebocontrolled trials, or reliance on tables of analyses of suspect substances

#### Reported Intolerances

- Coloured and flavoured lollies 100%
- Uncoloured lolly [just flavour] 87%
- Chocolate 87%
- Tomato Sauce 80%
- Smells paint, petrol, perfumes 70%
- Soy Sauce 65%
- MSG 57%

[See thesis for more detail www.FoodIntolerancePro.com]

# Collect data on tolerance of individual foods

- Dietitians need to collect outcome data to provide information on likely risk of a reaction and updating this over years
- Clinical findings have value where each patient is an individual with their own "metabolic fingerprint"
- We accept that some have side effects to medicines, so do some to foods and additives

#### Conclusion

- Dietitians need to be assertive as dietetics is the profession that can best provide answers
- Clinical findings can be collated to provide a basis for a sophisticated understanding of
- the best initial diet,
- which children are diet responders, and
- what foods and additives are not commonly tolerated.
- Contact details: <a href="mailto:breakey@ozemail.com.au">breakey@ozemail.com.au</a>
   Ph 0412 982 158 07 54267531