



Food Chemical Sensitivity: is it disappearing into history?

Early Care Network Forum for Paediatric Dietitians

Brisbane June 2017

Joan Breakey

M App Sc B Sc DNFS Cert Diet TTTC



Take home messages

- Food chemical sensitivity (FCS) is not common
- Patients have a wide variety of symptoms
- Research has not incorporated complexity
- Keep it up your sleeve
- Use when a patient makes the connection
- There is hope it will be better recognised

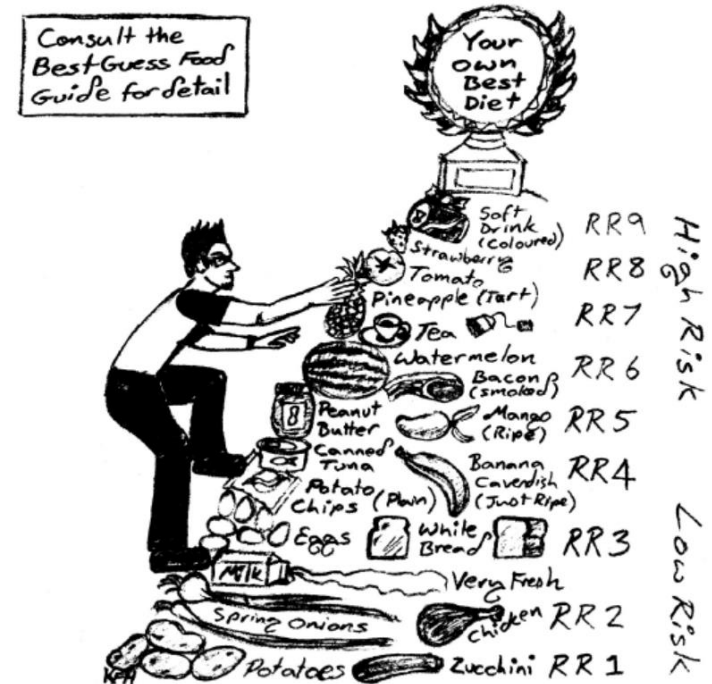
Two conflicting ideas

1. Scientific community

- looking at research **groups**
- report the diet has not been “proved”
- wish for simple methodology

2. **Individuals**

- who see me or write to my site
- frustrated as they are not believed
- wish for their particular symptoms to be recognised



Two conflicting orientations

My aim today is to reconcile:

1. research in **population groups**

versus / and

2. practice with **individuals**

In food chemical sensitivity they
are both complex but resolvable
and rewarding



There is 40 years of history

- In 2004 I visited Great Ormond Hospital.
 - Christine Carter surprised staff re research 20 years before. Consultants supported research, and Canada, US, NZ & Oz.
- Contrast this with now.
 - Public use self-help groups & naturopaths, and now diets are on the internet



Why is this a modern problem?

- 100 years ago my grandfather insisted on pepper.
- Only 50 years ago most people cooked everything “from scratch” (meat & 3 veg).
- Change since Baby Boomers has been phenomenal!



Increased flavour, herbs & spices, additives, convenience, money for food, better food storage, variety, more international foods...



Dietitians generally letting it go into history

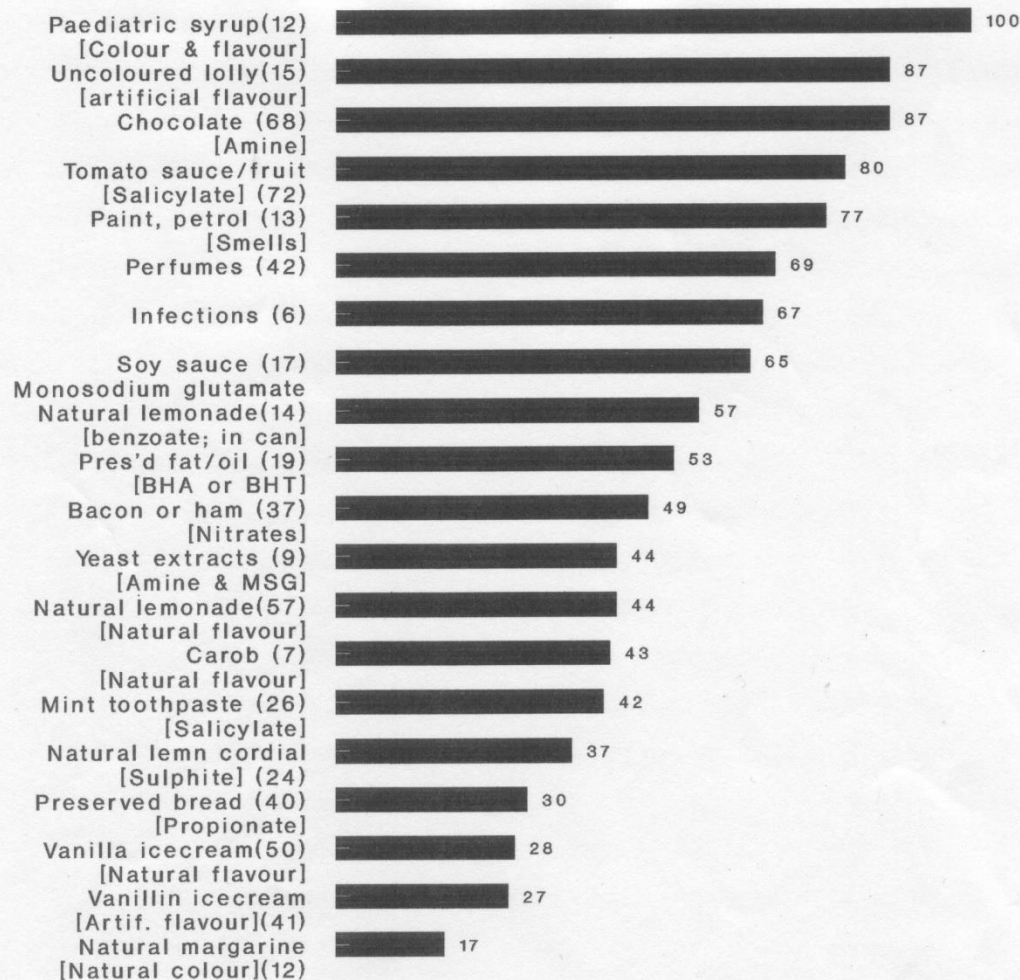
- Research reporting diet question “not proved”
- Training schools - some allergy, but little food chemical intolerance (FCI)
- Additives = “poor quality foods”
- Variety of fruit = good normal diet
- Low chemical diet not public health issue
- FODMAPS intolerance, but many dietitians are not supporting food chemical intolerance
 - Supporting hypnotherapy instead

Some dietitians & doctors responding to patient need

- Clinical research done in Australia
- Many dietitians interested and motivated
- Patients present with many symptoms
- Accepting that diet therapy is **individual**
- Some noting FODMAPS not enough > use Low Chemical Diet



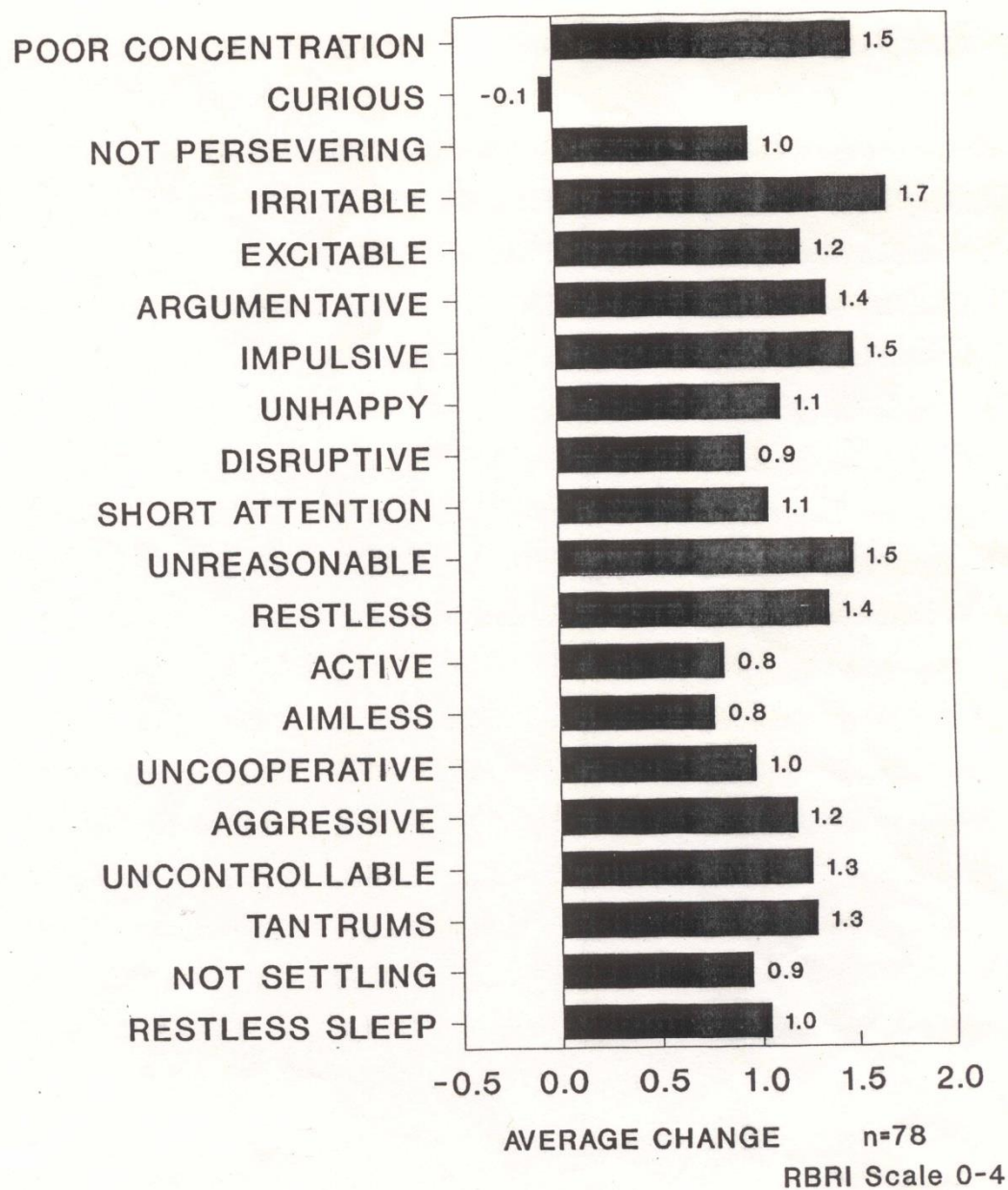
Individual food trials and reported intolerances



% intolerant

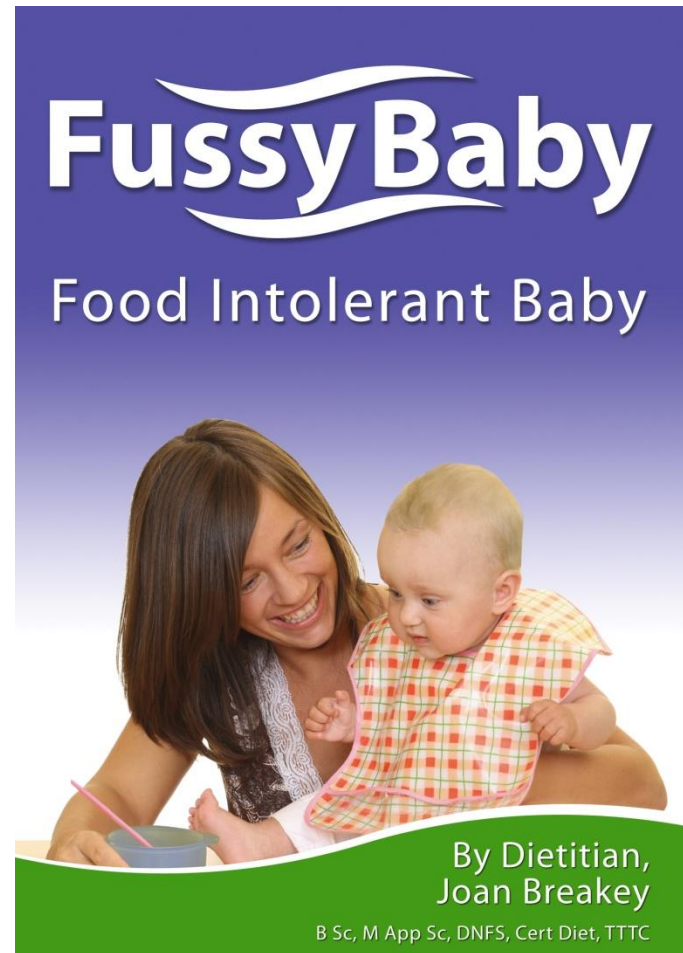
(n) = number testing food

Diet effects for all responders



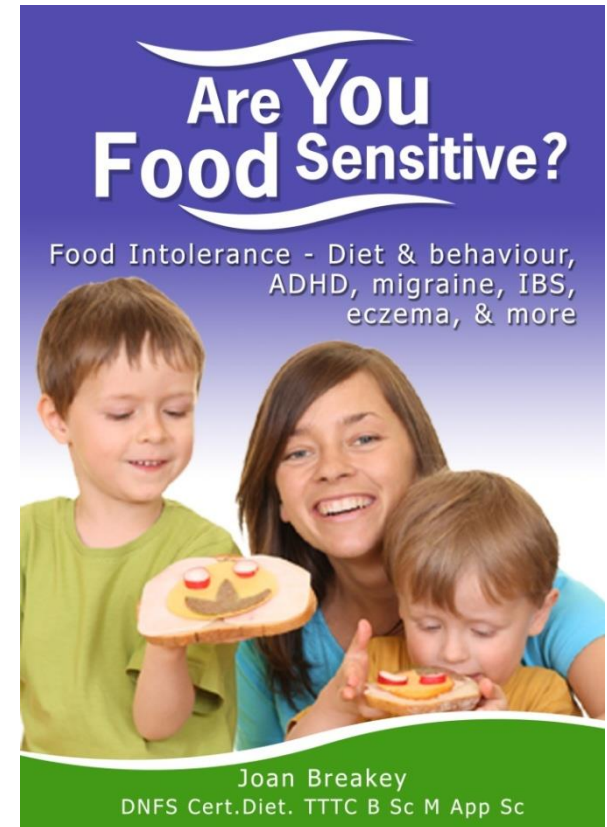
The public (our patients) are not letting it go into history

- Additives often avoided, re irritability, sleep, behaviour problems, colic & ADHD
- Effect of additives - incorrect to blame sugar
- Alternative practitioners remove additives but add “tests”, treatments & supplements
- Internet & websites provide information – good and bad
- More emphasis on exclusion of dairy & gluten



Researchers are letting Low Chemical Diet go into history

- Question cannot be reduced to DBPC Trials
- Flavour cannot be blinded!
- Diet is not one item – includes additives, salicylates, amines, MSG & flavour enhancers (glutamates) & smells
- Includes various suspect substances but all metabolised by, possibly, sulphotransferases & mono-amine oxidases
- Research looks at **groups** with symptoms, or **groups** reacting to particular food chemicals



Important articles influencing thinking

- USA Millichap: “non-western diet” emphasis
 - Recommends excluding artificial food colours & adding omega3 FAs, vitamins, minerals,
 - but does not consider “which for who”
 - or how to find this out
- UK Skypala et al:
 - demonstrate the many problems doing research in this area
 - looked at specific chemicals so lost the overview of the LCD.
- Also book Food Hypersensitivity

Problem with variety of symptoms

– “medical speciality **grouping**”

- A food sensitive family could be seeing: paediatrician, allergist, immunologist, gastroenterologist, neurologist, respiratory physician, child psychiatrist, ENT...
- Each see only a few food sensitive children so no point of focus for research

But – **individual patients** have their own cluster of symptoms that are not confined to one speciality

Patients don't feel like they are believed.

Eczema

Fussy Eating

Hyperactive

Rashes

Bed Wetting

Impulsive

She was really quite nice to live with...

Distractable

Asthma

Car Sick

Ear Aches

Sleep Problems

Limb Pains

Vomiting

Reflux

...some of the time!

Diarrhoea

Poo Odour

Tummy Aches

Mood Changes



'My son's a megastar...in China!'

It's fair to say that **DEB HARDING's** son had an accidental path to stardom. Here, the 52-year-old Queensland mum reveals how her quiet and shy boy stumbled upon the most unlikely career path

Like any proud mother, Deb Harding loves talking about her son's achievements – and with good reason.

After all, he's a popular TV presenter with chart-topping hits and millions of fans. But who is he? At home in Karabin, near Ipswich in Queensland, he's simply 26-year-old Harry Harding. But in China, where he now lives, he's Hazza. And he's not just a star, he's a superstar! The story of how that happened is as unlikely as it is bizarre.

"Harry never set out to be famous," Deb says, laughing. "In fact, he was quite shy as a little boy. What has happened to him is the last thing I'd expect."

Deb and husband Graeme raised Harry and his sister Bronte on their rural 30-hectare property. But from very early on, Harry was looking beyond his rural horizons.

"He'd sometimes carry an atlas under his arm and loved visiting big cities," Deb remembers fondly. "If he sat down to draw, he always drew skyscrapers."

At primary school, Harry studied Mandarin Chinese and discovered he had an affinity for languages. Convinced Mandarin at his high school, West

Moreton Anglican College, he naturally gravitated towards the international students, many of them from Asia. That helped spark a deeper interest in Asian cultures and travel to both China and Korea.

Leaving school, Harry continued his studies at university. He debated teaching English as a foreign language one day, or becoming an interpreter.

Looking for novel ways to further his language skills, he began listening to Mandarin pop songs.

"That led to an interest in karaoke, which

is huge throughout Asia," Deb explains.

On nights out with his friends, Harry was known to get up and perform.

"The first time I saw him perform was at a karaoke bar in Brisbane, when he

sang a Mandarin pop song," Deb says. "I was shocked. He wasn't my shy little boy anymore."

And he was actually really good!

While holidaying in China in 2011, a 21-year-old Harry posted some videos of himself singing on Youku, the Chinese site similar to YouTube.



"It was just a bit of fun, for his friends to watch," Deb says.

One of the songs Harry posted was a Chinese hit called *Listen to Your Mother*, which he'd initially recorded as a surprise for Deb on her birthday. It led to other videos which quickly became internet sensations.

The sheer extent of his popularity became apparent when a producer from GDTV World – a TV channel in the southern China city of Guangzhou – contacted Harry and invited him to sing on a local TV show.

"Harry was really excited and couldn't believe it but thought, *Why not? Let's see what happens*," Deb remembers.

What happened next exceeded all his expectations. Harry made such an impression that he was offered a full-time job as a host on *FourFive*, a popular talk show.

"You really couldn't make it up," Deb says. "One day he was a student and travelling in China; the next he had his own TV show!"

Harry interviewed everyone from Chinese politicians to ordinary people who'd done extraordinary things. And the audience couldn't get enough of the Australian boy who could sing in their own language, too.

After recording his first single, *Let Go*, the song soared to number one on the local charts, where it stayed for 11 weeks. His next single, *No Worries*, was also a huge hit. Combined, his music videos scored over 50 million hits on video-sharing sites.

Back home, Deb, Graeme and sister Bronte watched on bemused.

"It was surreal," Deb says. "Our son had become a celebrity in China. It was completely out of the box."

Modest Harry was just as surprised as his parents.

"I feel like it's impossible," he told one interviewer, saying he was living a dream and kept expecting to wake up.

"He thought it would all come to an end. But it didn't," Deb says. "He kept getting offered new contracts."

Since then, Harry's career has gone from strength to strength. He's hosted a travel show, a documentary series, performed at concerts and worked for a Hong Kong TV station. He's even started to produce new singing talent and has a radio segment.

And to Deb's astonishment, she discovered Harry's star had been, too. "I was at a wedding place with Harry when a Chinese man suddenly came up and shook his hand and asked for an autograph – it was bizarre! People have even followed him around supermarkets," she says.



BIG IN CHINA
Harry, aka Hazza, is a pop star and music producer

Though proud of his achievements, Deb says it's more important to her that Harry's happy.

"And he is," she says, grinning proudly. "He loves what he does."

For sure, Harry makes his home in Guangzhou, a bustling city of 13 million and a far cry from the sleepy town

where he grew up.

"It's a city that never sleeps. Day and night there are people everywhere," says Deb, who's visited several times.

"In fact, it reminds me of those cityscapes Harry used to draw when he was a little boy."

And while the 26-year-old is a rising star in the world's most populous nation, there's no chance of fame going to his head.

"He might be a pop star in China," says Deb. "But back home in Ipswich he's just Harry – and that's the way he likes it."



COUNTRY COMFORT
Harry's parents Deb and Graeme, and sister Bronte on the family property

Problem with variety of suspect chemicals

- Aim to consider all in any research – need low chemical diet as a whole – vs
 - Additives - re ADHD & ASD & irritability
 - Chocolate - re headaches or on its own
 - MSG, Asian food - tummy aches etc
 - Tyramine sensitivity - on own esp in USA
 - Salicylates – emphasised at RPAH
- But **individual patients** have their own cluster of food chemicals they react to

Hope for the future



- “Time to improvement” study Great Ormond St
 - Lozinski showed 80% of children with non-IgE mediated reactions did react to food
 - ? Role for food chemicals as well as whole foods
- Eosinophilic oesophagitis
 - 6 Food elimination diet, allergy tests not enough
 - Clinicians investigating diet
- FODMAPS
 - Dietitians hearing patients reacting to berries, grapes and spice, or additives

Only one way to prove food sensitivity

- Decide on exclusion diet – preferably low chemical
- Emphasize “It is not going on a diet that proves sensitivity but having symptoms return with food reintroduction challenge”
- This key idea applies to both research **groups** and **individuals** for any discussion about ideas from anywhere

Hope resolving the two conflicting ideas

1. Scientific community - report the diet has not been “proved” for **groups** & wish for simple methodology

>> **clinical research**
= care of individuals
added up to provide
picture (see my
thesis)



Hope resolving the two conflicting ideas

2. **Individuals** who see me or write to my site - frustrated as they are not believed, wish for their particular symptoms to be recognised
- >> **clinical care of individuals**, findings added up to provide picture - see my books, & add your findings



What can you do?

- Consider diet when patient reports symptom-food link.
- Diet investigation as part of overall care
- Listen to story: use Family Sensitivity History
 - Individuals can then begin diet therapy from suspect chemical groupings
 - Best result will still be from Baseline Low Chemical Diet

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.

<u>Family member</u>	<u>Symptoms</u>	<u>Fussiness</u>	<u>Suspect Substances</u>
First family member [Member investigating diet]	Colic, sleep problems		
Brothers			
Sisters			
----- Mother	Headaches with perfumes		
Aunts			
Uncles			
Maternal grand-mother			
Maternal grand-father			
----- Father	Gut ache with spice		
Aunts			
Uncles			
Paternal grand-mother	Itching with citrus		
Paternal grand-father	Hayfever with grass		

The Family Tree



Understanding your Food Sensitive patients

- Listen to story with “Diet Detective” attitude
 - Fussiness and supersensitivity gives clues
- Families and individuals differ in “dislikes”
- Child can be “diet detective”
- Irritability, sleep & behaviour problems affect family function & harmony
- Would your patient say, “(s)he won’t believe me?” about you

Are You
Food Sensitive?

The Diet Detective Approach
to the Investigation of
Suspected Food Sensitivity

A Manual for Dietitians

Joan Breakey
DNFS Cert.Diet. TTTC B Sc M App Sc

Use before and after Low Chemical Diet

ROWE BEHAVIOURAL RATING INVENTORY (RBRI)

Parents, for each of the following paired behavioural statements, please mark a cross over the dot (e.g. \odot) which is nearest the statement which best describes the behaviour of the child.

1	Cannot concentrate on any particular task; easily distracted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Can concentrate on any task; not easily distracted
2	Eager to learn: curious and inquiring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Shows little interest, curiosity, or motivation in learning
3	Perseveres in the face of difficult or challenging work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Lacks perseverance; is impatient with difficult or challenging work
4	Irritable, 'touchy', 'cranky'	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Even tempered
5	Easily excited; gets 'high'	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Not easily excited; placid
6	Patient and compliant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Demanding and argumentative
7	Is able to control own behaviour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Has difficulty controlling own behaviour
8	'Grizzly'; cries easily; unhappy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Contented: happy
9	Relates warmly to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Provocative; disruptive; exasperating
10	Persistent; sustained attention span	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Easily frustrated; short attention span
11	Difficult to reason and communicate with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Easy to reason and communicate with
12	Restless; fidgety; can't sit still	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Relaxed; can sit still
13	On the go; lively; always moving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Settled; calm
14	Purposeful activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Aimless activity
15	Co-operative; shares with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Disputes; fights over sharing; and taking turns
16	Rough or aggressive with other children - usually unprovoked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Gentle; not aggressive with other children; even when provoked
17	Parents have no difficulty in controlling child's behaviour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Parents have difficulty controlling child's behaviour
18	Frequent temper tantrums	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Rarely has temper tantrums
19	Has difficulty in settling down to sleep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Settles down to sleep easily
20	Undisturbed, restful sleep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Disturbed, restless sleep



Conclusion

- Dietetics is the profession that can best provide answers for both research and practice.
- Clinical findings can be collated to provide the basis for a sophisticated understanding of:
 - the best initial diet
 - which children are diet responders
 - what foods & additives are not commonly tolerated

Joan Breakey www.FoodIntolerancePro.com

breakey@ozemail.com.au Ph 0412 982 158 / 07 54267531

References (1 of 2)

- Lozinsky, A.C., Meyer, R., De Koker, C., Dziubak, R., Godwin, H., Reeve, K., Dominguez Ortega, G., & Shah, N. (2015). **Time to symptom improvement using elimination diets in non-IgE-mediated gastrointestinal food allergies.** *Pediatric Allergy & Immunology*, 26(5), 403-408.
- Skypala, I.J., Williams, M., Reeves, L., Meyer, R., & Venter, C. (2015). **Sensitivity to food additives, vaso-active amines and salicylates: a review of the evidence.** *Clinical & Translational Allergy*, 5(34), DOI 10.1186/s13601-015-0078-3
- Review by Skypala et al on Sensitivity to Additives, etc.
<http://foodintolerancepro.com/review-chemical-diet-evidence-useful/>
- Diet recommended by reviewers is not useful
<http://foodintolerancepro.com/diet-recommended-reviewers/>
- Neims, A.H. (1986). **Individuality in the response to dietary constituents: some lessons from drugs.** *Nutrition Reviews*, 44(Supplement), 237-241.
- Waring, R.H. & Klovzra, L.V. (2000). **Sulphur metabolism in Autism.** *Journal of Nutritional & Environmental Medicine*, 10(1), 25-32.
- Weiner, D.L., & Bechtel, K.A. (2015). **Reye Syndrome.** Retrieved from <http://emedicine.medscape.com/article/803683-overview>

References (2 of 2)

- Rodriguez-Sanchez, J., Gomez Torrijos, E., Lopez Viedma, B., de la Santa Belda, E., Martin Davila, F., Garcia Rodriguez, C., Feo Brito, F., Olmedo Camacho, J., Reales Figueroa, P., & Molina-Infante, J. (2014). **Efficacy of IgE-targeted vs empiric six-food elimination diets for adult eosinophilic oesophagitis.** *Allergy*, 69(7), 936–942.
- Grenville, K. (2017). *The case against fragrances*. Melbourne, Australia: Text Publishing. <https://www.textpublishing.com.au/books/the-case-against-fragrance>
- Breakey, J.C. (2013). **Salicylate elimination diets in children: is food restriction supported by the evidence?** *Medical Journal of Australia*, 199(7), 459-60.
- Review Article on Diet and Behaviour 1997 JPCH
<http://www.foodintolerancepro.com/category/evidence-base/the-role-of-diet-and-behaviour-in-childhood/>
- Howard, A.L., Robinson, M., Smith, G.J., Ambrosini, G.A., Piek, J.P., & Oddy, W.H. (2011). **ADHD is Associated with a “Western” Dietary Pattern in Adolescents.** *Journal of Attention Disorders*, 15(5), 403-411.
- Millichap, J.G., & Yee, M.M. (2012). **The diet factor in attention-deficit/hyperactivity disorder.** *Pediatrics* 129(2), 330-337.