



Presented By:
Greg McLoughlin

Brain chemicals and their links to
behavior and high performance.



HbD International

Optimizing brain chemistry for improved health and performance.



WORKPLACE HEALTH.

The next phase.



General Health and Injury Prevention.



High Performance Pathway.

Human Spirit - Mental - Emotional - Physical



Brain Chemistry.

Our individual 'blueprint'. Why we do what we do?



- Every individual has a unique brain chemistry profile
- Brain chemistry is the major determinant of behaviour
- Optimal brain chemistry maximizes health and performance

- Implications on safety?
- Executive Health?.....increase performance.....& health!



1. Why do you do what you do?

- Behaviours (natural tendencies under stress)

2. Impact on:

- Health
- Performance

3. Prescription

- Specific to your brain chemistry profile

4. Managing People

- One size definitely doesn't fit all!



Brain chemistry and performance concepts

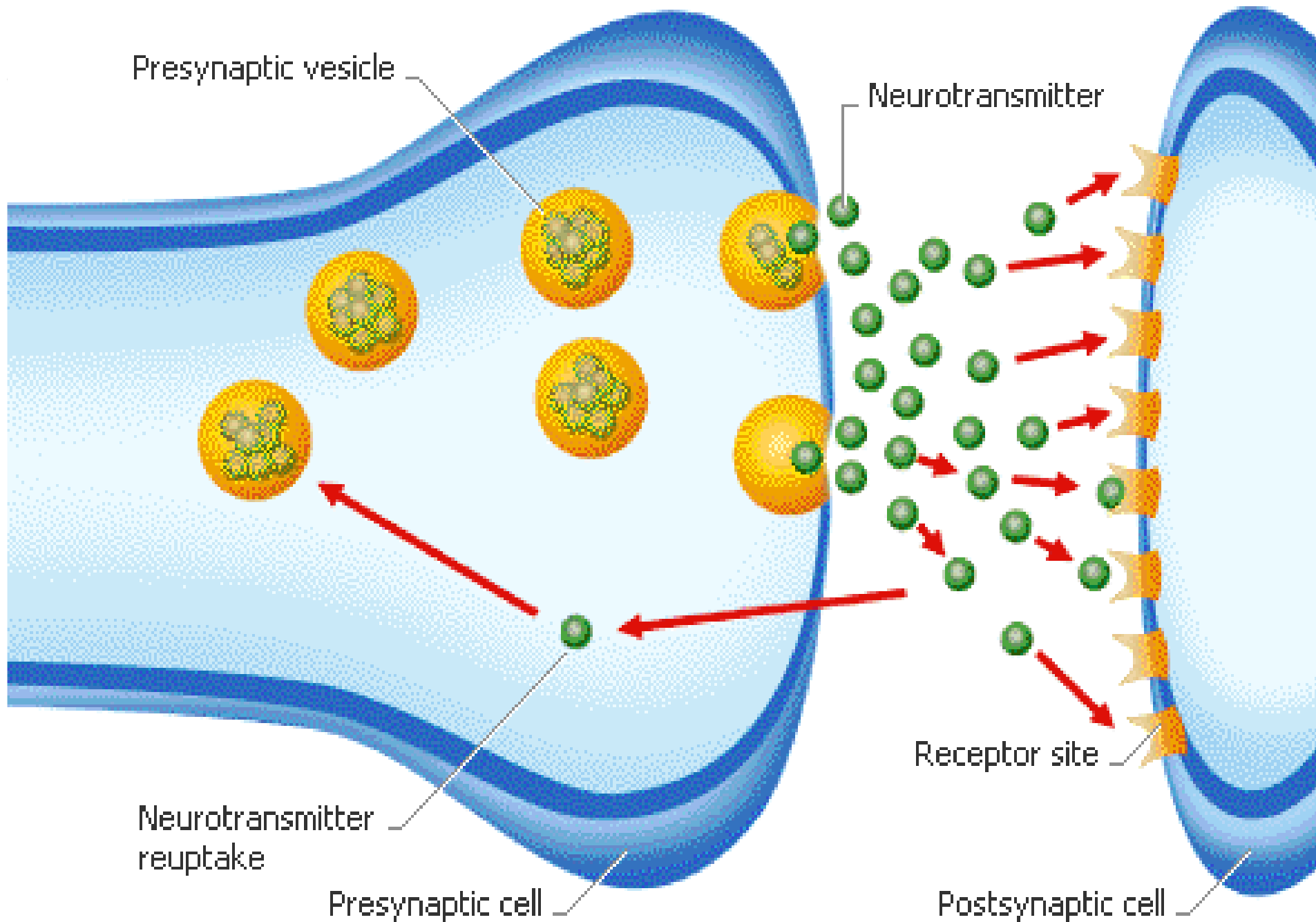
- By understanding your brain, you can influence its responses
- By influencing its responses, you can enhance your performance, health and life balance



Nerve transmission



- Electrical energy converted to chemical energy
 - Norepinephrine
 - Dopamine
 - (GABA)
 - Serotonin
 - Acetylcholine



Case study

- professional services.





Case study - Brain Reward Centre

- *What feels good will be repeated*
- *What doesn't feel good will be avoided*

Arousal

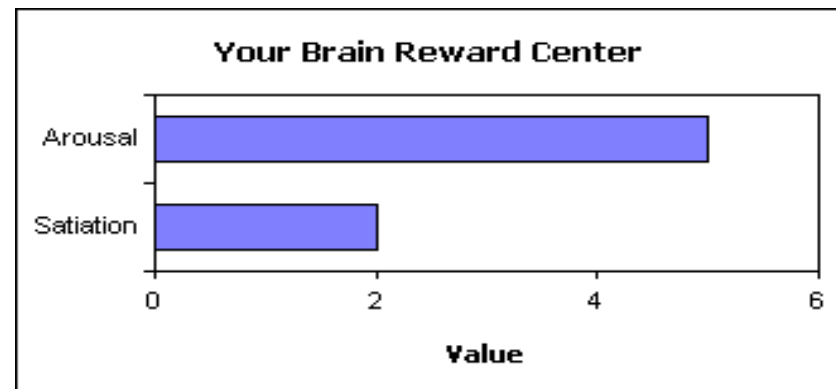
– prefers exciting activities

- “Dopamine seeking”
- Natural tendency behaviours that
↑ dopamine

Satiation

– prefers calming activities

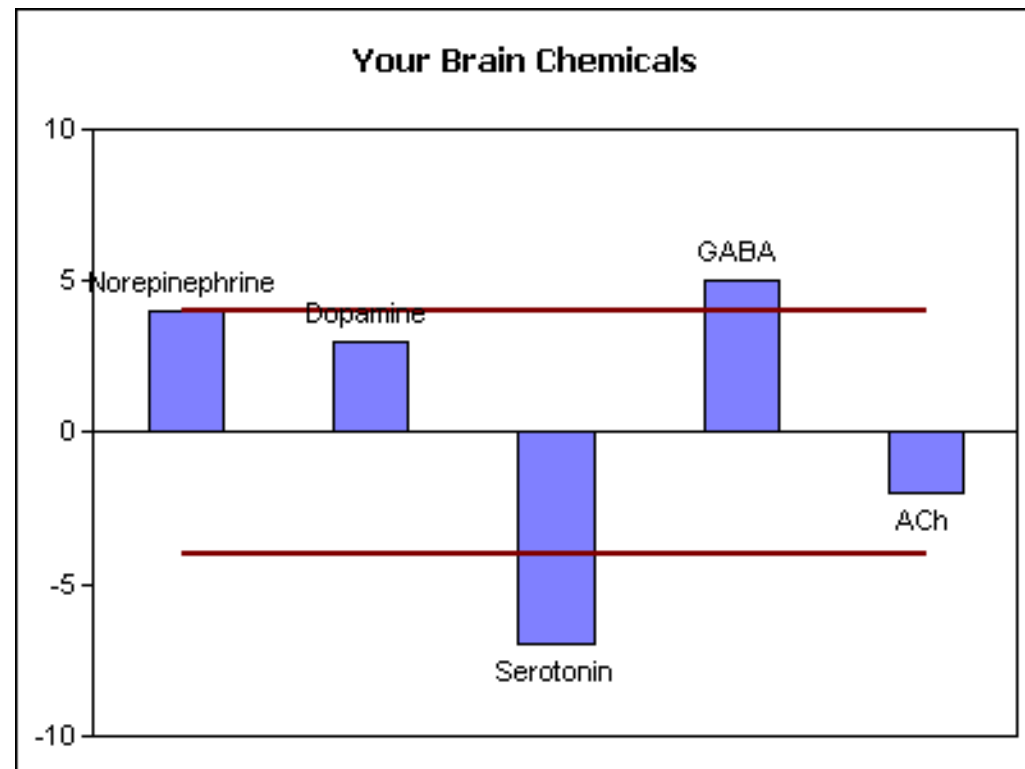
Seeks calm / decrease anxiety
Natural tendencies that ↑
serotonin and ↓ dopamine





Case study - Brain Chemical Profile

Indicates a mild level of stress

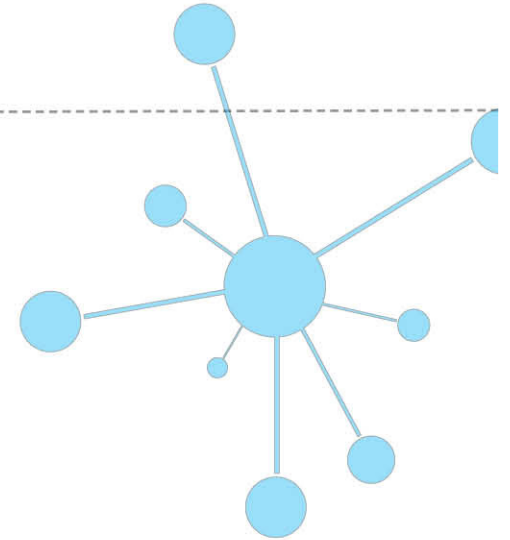


Case study - Natural Tendency Behaviours

AROUSAL – Natural Tendencies

- Crisis Creation
- Anger
- Overreaction
- Team Oriented
- Taking Action
- Conceptualizing behaviour

**The last thing that an arousal personality
wants to feel is depressed or “flat”!**

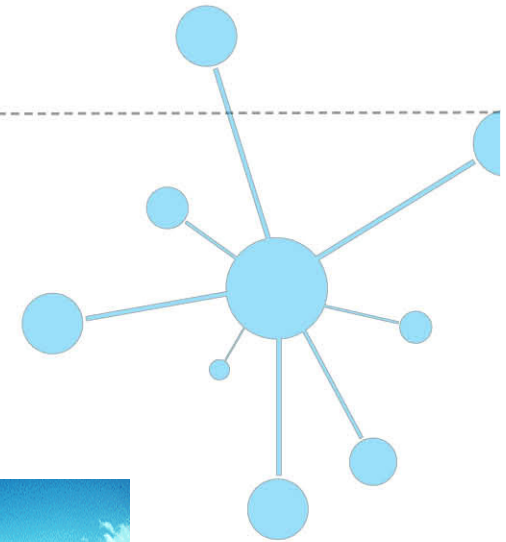
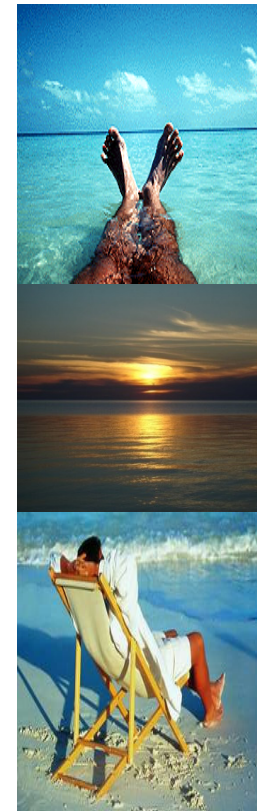


Case study - Natural Tendency Behaviours

SATIATION – Natural Tendencies

- Controlling behaviour

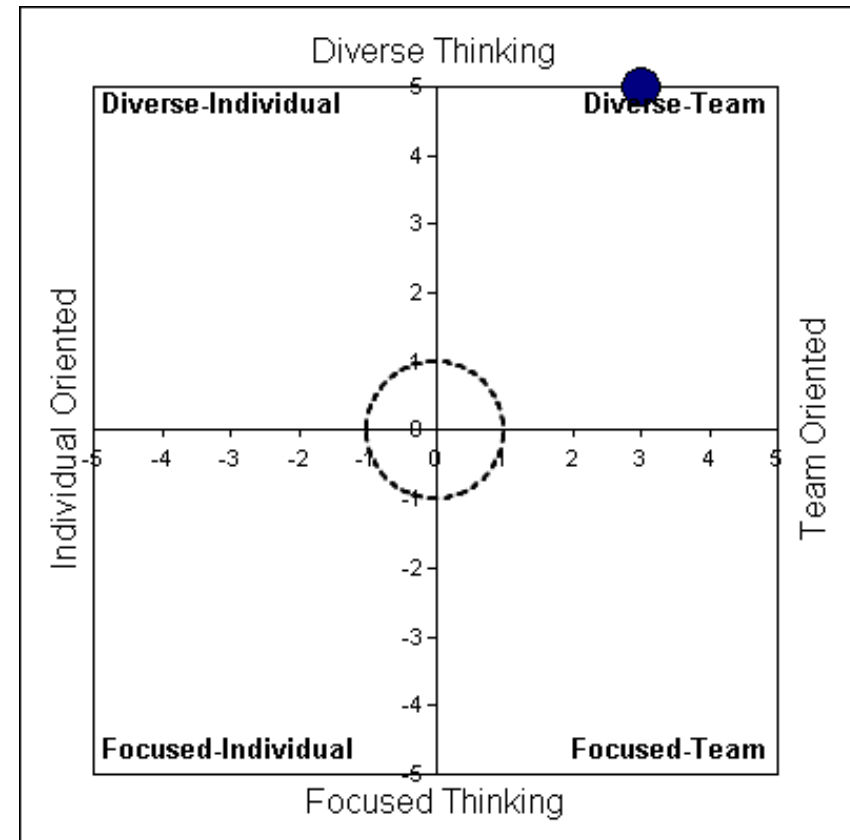
This behaviour was the biggest
“performance inhibitor” for this person.





Case study - Neurobehavioural Style

- Creative thinking. “Big Picture”. Not detail oriented
 - Enjoys multiple tasks
 - When “stressed” – “controlling behaviour” is a disaster for this person.
 - Continual cycle of individual + organisational stress!



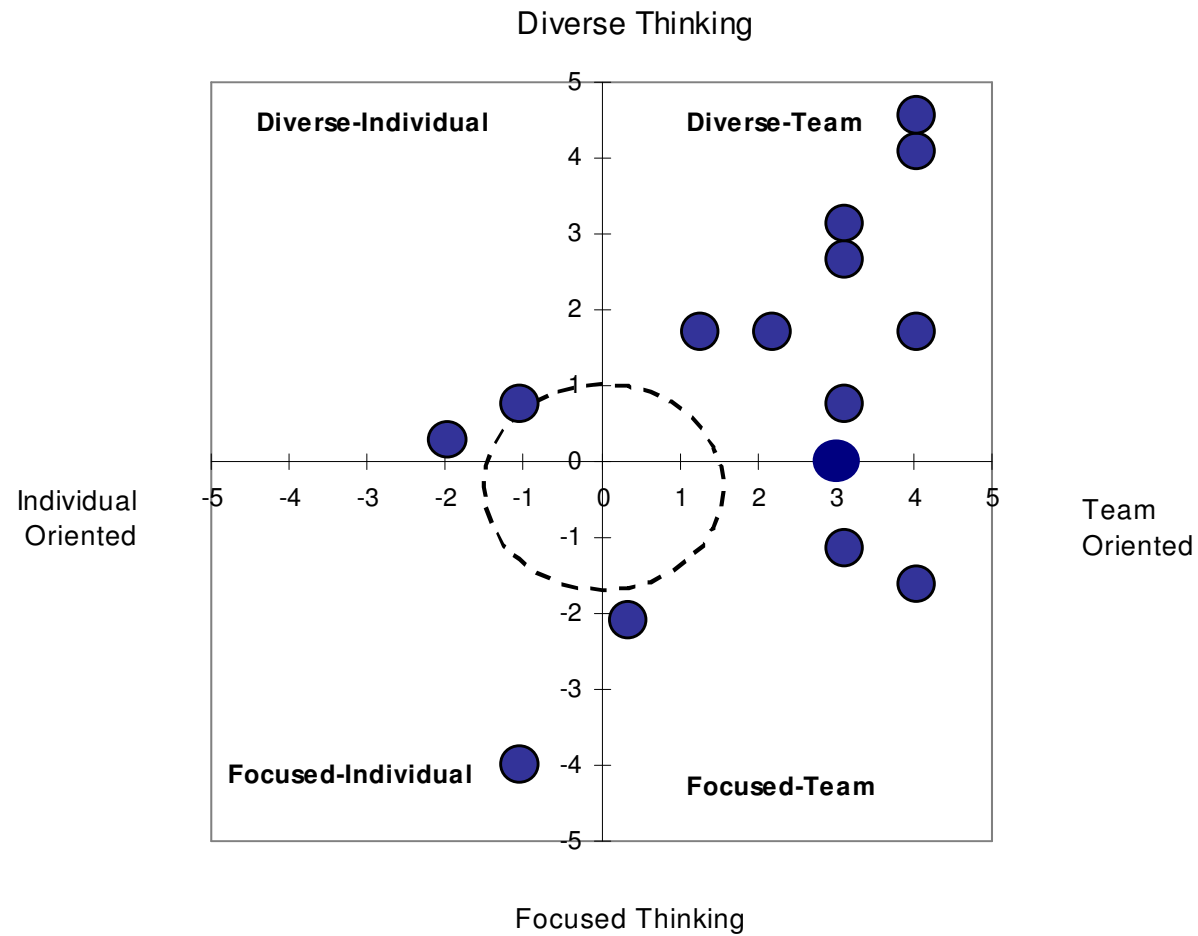


Neurobehavioural environments

- Efficiency is based upon working within our “natural environment”
- When working outside of our “natural environment” we can improve our efficiency IF we know what to do



Neurobehavioural style



When you get out of balance, what feels good to you is what keeps you out of balance!

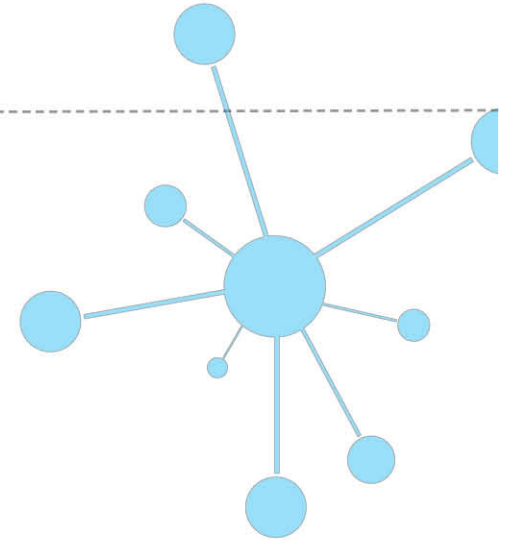


Case study - Natural Tendency Behaviours

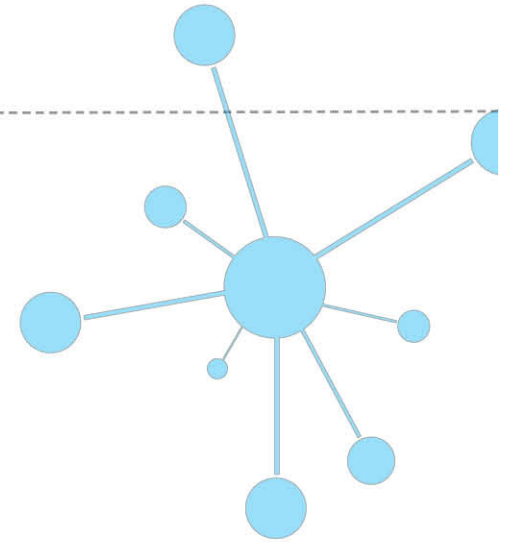
AROUSAL – Natural Tendencies

- Crisis Creation
- Anger
- Overreaction
- Team Oriented
- Taking Action
- Conceptualizing behaviour

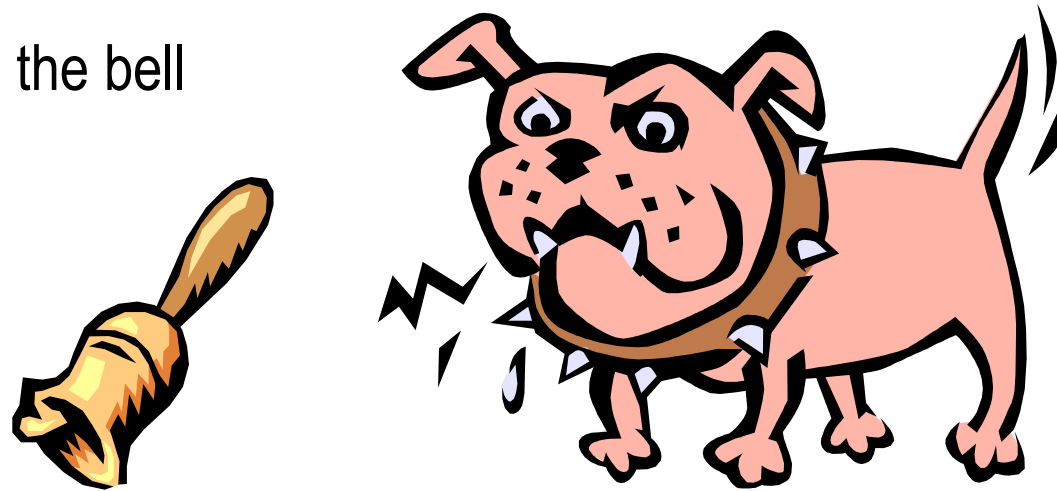
**The last thing that an arousal personality
wants to feel is depressed or “flat”!**



Developing natural tendencies or automatic behaviours



Pavlov's dog and the bell





Understanding your brain chemistry enables you to change your behavior before the bell rings.



“Yellow Flags”

General Symptoms of Less-than-Optimal Serotonin

Physical	Emotional	Lifestyle Responses	
<ul style="list-style-type: none">▪ Low Energy▪ Muscle Fatigue▪ Excessive Tiredness	<ul style="list-style-type: none">▪ Insecurity	<ul style="list-style-type: none">▪ Low Self Esteem▪ Lack of Confidence▪ Negative Thoughts▪ Inability to Concentrate▪ Carbohydrate Cravings▪ Procrastination▪ Inability to Focus	<ul style="list-style-type: none">▪ Perfectionism▪ Defensiveness▪ Over Sensitivity▪ Indecisiveness▪ Lack of Creativity▪ Resistance to Change▪ Take Things Personally



Strategies for balancing brain chemistry

- **Identify your “Yellow Flags” (signs & symptoms)**
- **Exercise** (Type and frequency)
- **Diet** (What foods and when)
- **Nutritional supplementation** (Specific eg: *St John’s Wart*)
- **Hobbies** (What, when and where)
- **Music** (Type and purpose)
- **Thoughts / Perceptions** (“insight” – “natural tendencies”)

When under stress – adhere most closely to your program



Stress and Resilience

- What causes YOU to be stressed?
- Stress reduction isn't the issue
- Handling more stress without it adversely affecting your health or family is the goal

Each person's stress is unique

- Each person's solution is unique
- The uniqueness of our response to stress is determined by brain chemistry



Brain chemistry and performance concepts

- By understanding your brain, you can influence its responses
- By influencing its responses, you can enhance your performance, health and life balance



Brain chemistry health and performance

- Balanced Brain Chemistry is Critical for Accurate Perceptions.
- Accurate Perceptions are Critical for long term optimal functioning.

Thank you!

Greg McLoughlin
Managing Director
Health By Design

gregm@healthbydesign.com.au