Digital Evolution of CSIRO Total Wellbeing Diet (TWD)

AHIA Annual Conference November 2011
Dr. David Kannar
CSIRO Wellbeing Programs

- The CSIRO and BAKER IDI Diabetes Diet and Lifestyle Plan
- The CSIRO Healthy Heart Program
- The CSIRO Total Wellbeing Diet
- The CSIRO Total Wellbeing Diet Recipe Book
- The CSIRO Wellbeing Plan for Kids

Extending Australia's favourite weight-loss program.
• Launched 2005
• TWD is a scientifically supported health and wellbeing weight management program
• Penguin Publishing sold over 1m books
• Books are a static, mature media and offer limited personalisation and impact on behaviour
• CSIRO is developing a multimedia approach with interactive tools and is looking for partners
Status of TWD program & Digital Evolution

Future

• Address chronic disease prevention by empowering people to take control of their health with a scientifically evaluated program

• Partner with interested AHIA member(s) to further develop program delivery to the Australian community

• Build a long-term cohort for data collection

• Ongoing need to evaluate impact of alternative ways of providing TWD relevant to commercial partner needs and metrics
Focus on relevant key Australian consumer segments:

**Families:**
- Trusted name
- Flexible – fits your family
- Sustainable
- Easy to understand

**60+:**
- Trusted name
- Structured eating plan
- Tailored advice
- Overall lifestyle advice

**Young adults:**
- General nutrition information
- Weight loss
- Healthy lifestyle

Opportunities for new digital products and services specific to health insurance industry:

- TWD website (with social media)
- Mobile/ iPad app's
- Clinic based programs - Primary Practitioners
- In-school programs
- Grocery shopping app's
- Pharmacy Program
- TWD recipes
•To be sure we’re on the right trail.......
The CSIRO Total Wellbeing Diet

As the obesity epidemic loomed, we at the CSIRO realised that scientific research into dietary patterns and weight control was urgently needed, (think in mind that Australians are now on average around 57 kg heavier than their counterparts of 20 years ago and more than half our population is either overweight or obese.) Since 1995, we have conducted a number of controlled trials to find out which dietary approaches will give the best results, not only in terms of the amount of weight and fat you will lose, but also in terms of your overall health and wellbeing. In our early studies we looked at the amount of dietary fat and what kind of fats people should eat for weight loss, at the psychological impacts of dieting, and at how much protein would help dieters control their appetite and prevent muscle loss.

The good news is that losing even a small amount of weight with the right diet can have substantial benefits for total physical wellbeing—lowering blood pressure, blood glucose levels, LDL cholesterol levels and insulin levels. No one drug could have that kind of impact.

What we found out about fat

We quickly discovered that eating less fat was not the only approach to weight control. Our very low-fat and higher fat diets resulted in equal weight loss, as long as people consumed the same total daily amounts of energy (kilocalories).

We also found, as just previous research had shown, that the type of fat you consume makes a difference to risk factors, such as the concentrations in the blood of LDL and HDL cholesterol. In fact, provided our volunteers ate “good”, healthy fats, such as those found in nuts, oils and soft margarines, the higher fat weight loss diets had a better effect on these blood fats than the very low-fat diets.

Should you go on a diet or not?

Experts don’t agree on the best way to help people lose weight, because there is no such thing as a “best” way - only a best way for you. We tried a number of dietary approaches and a number of ways of helping our volunteers go about them.

One school of thought says it’s counterproductive to encourage people to go on a restrictive diet. The concern seems to be that because dieting is normally a short-term activity, many people find it hard to stick to the program in the long term and then regain all the weight lost, plus a bit more. The usual recommendation is to make gradual rather than radical changes to existing eating patterns.

We have to say that we found absolutely no evidence to support this approach for the majority of people. In fact, we found the opposite. Whenever we tried the “take it slow and easy” approach,
• Build your own plan, with help from the system which understands your preferences and needs
• Instant feedback on the impact of your choices on your diet compliance
• Build your own plan, with help from the system which understands your preferences and needs
• Instant feedback on the impact of your choices on your diet compliance
Learns from meal plans created

- Learns from the meal plans created
- Recommends recipes based on their ingredients, how much you like them, when you last ate them etc
- Only recommends things which keep you within the rules of the diet
- Generates shopping lists based on your plan

<table>
<thead>
<tr>
<th>Plan for today</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td><strong>Alternative breakfasts</strong></td>
</tr>
<tr>
<td>Drag breakfast meals here</td>
<td>scrambled eggs</td>
</tr>
<tr>
<td></td>
<td>french toast</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td><strong>Alternative lunches</strong></td>
</tr>
<tr>
<td>Drag lunch meals here</td>
<td>baked mediterranean vegetables with ricotta</td>
</tr>
<tr>
<td></td>
<td>zucchini and mint pie</td>
</tr>
<tr>
<td></td>
<td>tuna with cannellini bean and basil salad</td>
</tr>
<tr>
<td></td>
<td>baked mushrooms with goat’s cheese and</td>
</tr>
<tr>
<td></td>
<td>watercress</td>
</tr>
<tr>
<td><strong>Dinner</strong></td>
<td><strong>Alternative dinners</strong></td>
</tr>
<tr>
<td>Drag dinner meals here</td>
<td>barbecued swordfish with charred</td>
</tr>
<tr>
<td></td>
<td>mediterranean vegetables and olives</td>
</tr>
<tr>
<td></td>
<td>seeded-mustard rack of veal with roasted</td>
</tr>
<tr>
<td></td>
<td>vegetables</td>
</tr>
<tr>
<td></td>
<td>barbecued steak with artichoke and herb</td>
</tr>
<tr>
<td></td>
<td>salad</td>
</tr>
<tr>
<td></td>
<td>baked snapper with basil, capers and</td>
</tr>
<tr>
<td></td>
<td>tomato</td>
</tr>
</tbody>
</table>

Change to: 28 Sep 2010
## Does your meal plan comply with the Total Wellbeing Diet?

<table>
<thead>
<tr>
<th>Overall</th>
<th>&gt;60%</th>
<th>&gt;30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lean protein</td>
<td>ok</td>
<td>ok</td>
</tr>
<tr>
<td>Wholegrain bread</td>
<td>under</td>
<td>under</td>
</tr>
<tr>
<td>High fibre cereal</td>
<td>under</td>
<td>under</td>
</tr>
<tr>
<td>Dairy</td>
<td>under</td>
<td>under</td>
</tr>
<tr>
<td>Fruit</td>
<td>under</td>
<td>under</td>
</tr>
<tr>
<td>Vegetables</td>
<td>ok</td>
<td>under</td>
</tr>
<tr>
<td>Fats and oils</td>
<td>ok</td>
<td>under</td>
</tr>
<tr>
<td>Indulgence foods</td>
<td>ok</td>
<td>ok</td>
</tr>
</tbody>
</table>

- **28-Sep**
- **29-Sep**
- **30-Sep**
- **1-Oct**
- **2-Oct**
- **3-Oct**
- **4-Oct**
- **5-Oct**
- **6-Oct**
- **7-Oct**

• Easy tracking of where to improve
Multiple viewing interfaces

- Multiple interfaces to track your diet compliance
TWD + Social Networking

- Discussion Forums
- Blogs
- Social Comparison
- Activity Updates
Positives of Social Support & Learning

• Sharing
  • experiences, recipes, meet up with others in real world, successes failures

• Motivation
  • Encouraged by success of others

• Similar hurdles experienced by others
  • When you hit the slump others may be in the same boat

• Open to all
• Low cost
Live User Study

- 8000 participants recruited, 5000 visited the site
- Various ICT features well received during use
- 12 week study
  - 3,000 kg excess weight lost
  - ~600 forum posts created (2700 responses)
  - ~4500 friendships formed (9000 initiated)
  - ~2300 blog messages added
  - 200,000 content page views
  - 31,000 forum views
  - 57,000 blog views
Next Steps

• Further develop digital program for AHIA members
• Run short term online program with optimal ICT features
  • Evaluate uptake and efficacy in targeted health insurance members
• Potential for roll out dynamic program according to needs of each AHIA company and continue to evolve
Thank you

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