Nestlé Nutrition - Helping athletes optimize performance

Richard Laube, CEO Nestlé Nutrition
Disclaimer

This presentation contains forward looking statements which reflect Management’s current views and estimates. The forward looking statements involve certain risks and uncertainties that could cause actual results to differ materially from those contained in the forward looking statements. Potential risks and uncertainties include such factors as general economic conditions, foreign exchange fluctuations, competitive product and pricing pressures and regulatory developments.
Our consumers: Extreme needs

Enhancing the quality of life
Our business: Organized to focus on our consumers' needs

Four dedicated business units

**Infant Nutrition** – helping infants and young children to grow and develop into healthy adults

**HealthCare Nutrition** – products and services for the elderly, and for patients managing certain medical conditions

**Weight Management** – personalized weight management programs to help consumers to lose weight and keep it off

**Performance Nutrition** – promoting peak mental and physical performance of athletes and highly active people

Estimated sales 2008 Nestlé Nutrition: CHF 10 billion
Nestlé Nutrition chose to compete in four large, high growth and high margin markets.
In 2007 CHF 12 billion RSV  '03-'07 est. CAGR = 6%.

- **Supplements CHF 2.5 Bio CAGR 5.2%**
- **Energy and Protein Bars CHF 2.2 Bio CAGR 6.1%**
- **Gels CHF .3 Bio CAGR 11.9%**
- **Isotonic Sport Drinks CHF 7.0 Bio CAGR 5.4%**

Nielsen, Datamonitor, Mintel
Familiar and exciting brands
Performance Nutrition –
Our philosophy

Help athletes perform better...

Anchor each product
to meet a specific sports physiological need,
paired with
a deep consumer understanding of usage
and emotional context
Why do athletes need Sports Nutrition?

• Healthy, balanced diet is the key to performance

• Science-based Sports Nutrition offers in addition:
  – portability/convenience
  – targeted nutrient composition
  – ergogenic boosters
  – stomach friendly solutions
R&D in Performance Nutrition: Global networks

- Nestlé Research Centre: leading-edge basic research in food & nutritional science

- Nestlé's global R&D network: competitive advantage for Nestlé Nutrition

- External partners: pushing frontiers of high technology
Partnering with existing technology - Diagnostics

- Currency, metrics and diagnostics – help athletes ‘measure’ and ‘see’ the impact of sports nutrition
- Specifically – Plasma cortisol, Metabolic age, heart rate and personalised hydration via sweat patch tests
- Partnerships with Tanita, Polar and 3M.
Partnering with Universities – Proven proprietary claims

• Applied research with independent research institutions, e.g. University Birmingham
  – furthers general sports science knowledge
  – may lead to proprietary products/claims

• Research proven carb blend for faster energy delivery
### SPORTS PHYSIOLOGICAL NEEDS AND NUTRITIONAL SOLUTIONS

<table>
<thead>
<tr>
<th>PERFORMANCE DRIVERS</th>
<th>STAMINA</th>
<th>STRENGTH</th>
<th>SPEED</th>
<th>RECOVERY/TRAINING ADAPTATION</th>
<th>SHAPE / STRUCTURE</th>
<th>BRAIN FUNCTION</th>
<th>SKILLS</th>
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<tbody>
<tr>
<td>Physiological Needs</td>
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<td>↑ Exogenous carbohydrate oxidation</td>
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<td>↓ Central fatigue</td>
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<td>↑ Endogenous fat oxidation</td>
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<td>Other Consumer Needs</td>
<td>Energy dosing, Better in-game delivery, convenient single serve powders</td>
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<td>Active ingredients/NN PN products &amp; concepts</td>
<td>1. 2:1 Glucose:Fructose Sources (PowerBar Performance, Gel, Endurance)</td>
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<td>2. Caffeine (PowerBar Gel, PowerBar Performance bar, eShot RTD, Frontier S2)</td>
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<td>6. Strips</td>
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<td>Packaging &amp; Delivery/NN PN products &amp; concepts</td>
<td>Bar, RTD, Powdered drink, Gel, Chains</td>
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<td>Emerging Active ingredients (and potential partners) (concepts)</td>
<td>3. Trehalose pre-exercise (Cargill); Isomatulose (Palatinit)</td>
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<td>3. Low GI carbs pre-exercise</td>
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<td>5. Galactose for liver glycogen loading</td>
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#### Physiological Needs
- Exogenous carbohydrate oxidation

#### Nutritional Solutions
- 2:1 Glucose : Fructose
C2MAX – proven to increase physical performance by 8%

GREATER UTILIZATION OF D-GLUCOSE + FRUCTOSE COMBINATION VS. ISOCALORIC GLUCOSE(1)
C2MAX and 3 Step System

STEP 1

THE POWER TO
ENERGIZE
fuel up with sustained energy

STEP 2

THE POWER TO
REFUEL
Quick energy to refuel

STEP 3

THE POWER TO
REBUILD
Rapid muscle recovery and repair

PowerBar Performance Energy Bar

PowerBar Gel

PowerBar Recovery Bar
Running a Marathon – Portrait

• Individual
  – Collegiate 400m runner, 1977
  – Family, Career
  – 4:21, Winterthur, May '07
  – 3:46, Lausanne, Oct '07
  – Career, Family
  – Training: 9hrs/week

• Goal
  – Qualify for Boston: 3:35

• Event
  – Zürich Marathon, April '08
Marathon Physiology

- Approximately 40 km (42.195)
- More than 800 marathons contested throughout the world each year
- 37,000 steps (180 steps/minute)
- 32,000 heart beats (150 beats/min)
- Energy expenditure: ~ 2650 kcals
- Full depletion of glycogen-loaded carbohydrate stores
Marathon: Nutritional Challenges

• Load CHO Stores before the race
• Refuel energy continuously during the race
• Hydrate during race to prevent dehydration
• Repair muscle protein, replace electrolyte and fluid losses and refill glycogen stores immediately after race
Running a Marathon – Energize before the event

- "Carbohydrate Loading" 1-2 days before to build up muscle glycogen stores (7-12g CHO/kg BW/day)
  - 750 g CHO/day ~ 3000g spaghetti (boiled)!

- High CHO, low fat/fiber breakfast 2 hrs prior

- Top off energy stores 30-60 minutes before the race with a high carb energy bar
Running a Marathon – Extreme energy needs during 42.2 km

- Energy in PB Gels:
  25g x10 = 250g CHO = 1000 kcal

- Energy in PB Sports Drink:
  66g CHO/l = 264 kcal

- Energy in PB Gel Blasts:
  9 x 5g CHO = 45 g CHO = 190 kcal

Energy intake: 1454 kcal
Energy spent: 2650 kcal
Running a Marathon – Extreme fluid needs during 42.2 km

• Fluid loss:
  – 4 liters (approximately 1 l/hr)

• Fluid intake:
  – 2.5 liters

• Net fluid loss:
  – 1.5 liter or approximately 2% bodyweight

American College of Sports Medicine:
Lose no more than 2% bodyweight due to dehydration to prevent endurance performance decline!
Running a Marathon – Recovery and learnings

• **Mission Accomplished**
  3:31

• **Recovery**
  – Carbohydrates immediately post-exercise stimulate rapid glycogen resynthesis
  – For rapid rehydration, drink 150% of body weight loss with high sodium
  – Protein/key amino acids immediately post-exercise augment exercise-induced training adaptation
Haile breaks marathon world record 2:03 hrs - Fuelled by new C2 MAX formula!
Chrissie wins Ironman Kona 9:10hr in 2007

New C2 MAX gels every 30 minutes

Favourite flavour – Chocolate!
Team New Zealand reach Americas Cup Finals
Olympic Games 2008 - Winning 8 Gold Medals...

• It was widely reported that Michael Phelps consumed 12,000 calories a day to fuel his 7 hours in the pool.

• Here we can exclusively reveal the real secret to his successful training: Michael has been a PowerBar user since 2000, and this year become the spokesman for the brand!
Educating the athletes

• Education through embedded nutritional services
• Direct consumer contact
• Direct to consumer sales

www.powerbar.com
Events – the consumer experience

Events sponsored by PowerBar increased to 1000/year

3 million samples distributed

Partnering with Runner's World magazine to co-fund
Team Elite - PowerBar sponsored Athletes

**PowerBar Team Elite™** is our worldwide network of influential sports enthusiasts who make a positive impact on their sport.

Our members include world champions, regional teams, local educators, coaches and extraordinary individual athletes of all levels!
Reaching key influencers at international scientific events

6 Scientific Symposia and Lectures in 2008!
Thank you.