



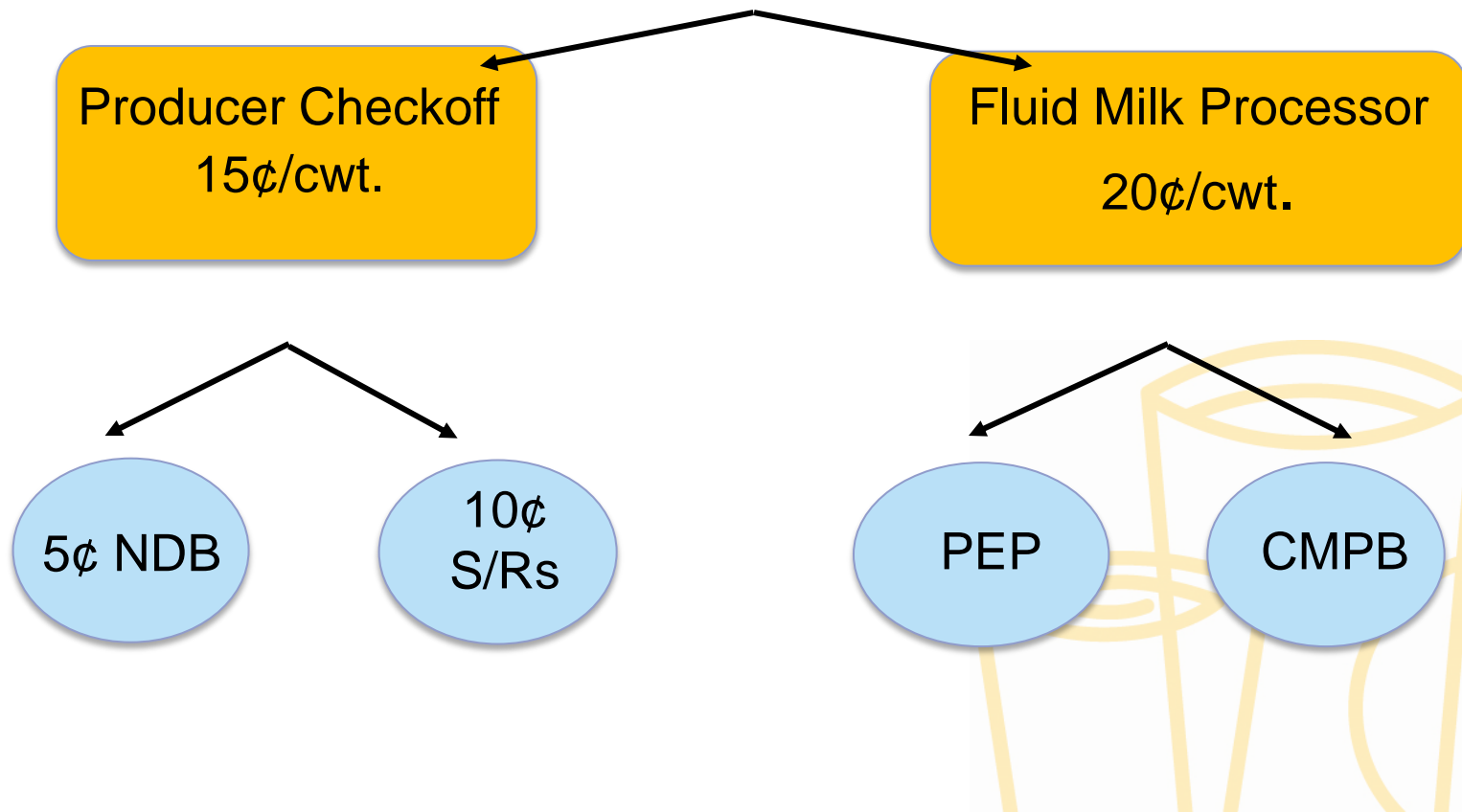
Dairy Marketing Opportunities

Mary Wilcox- Vice President, Business Development
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Dairy Promotion Funding



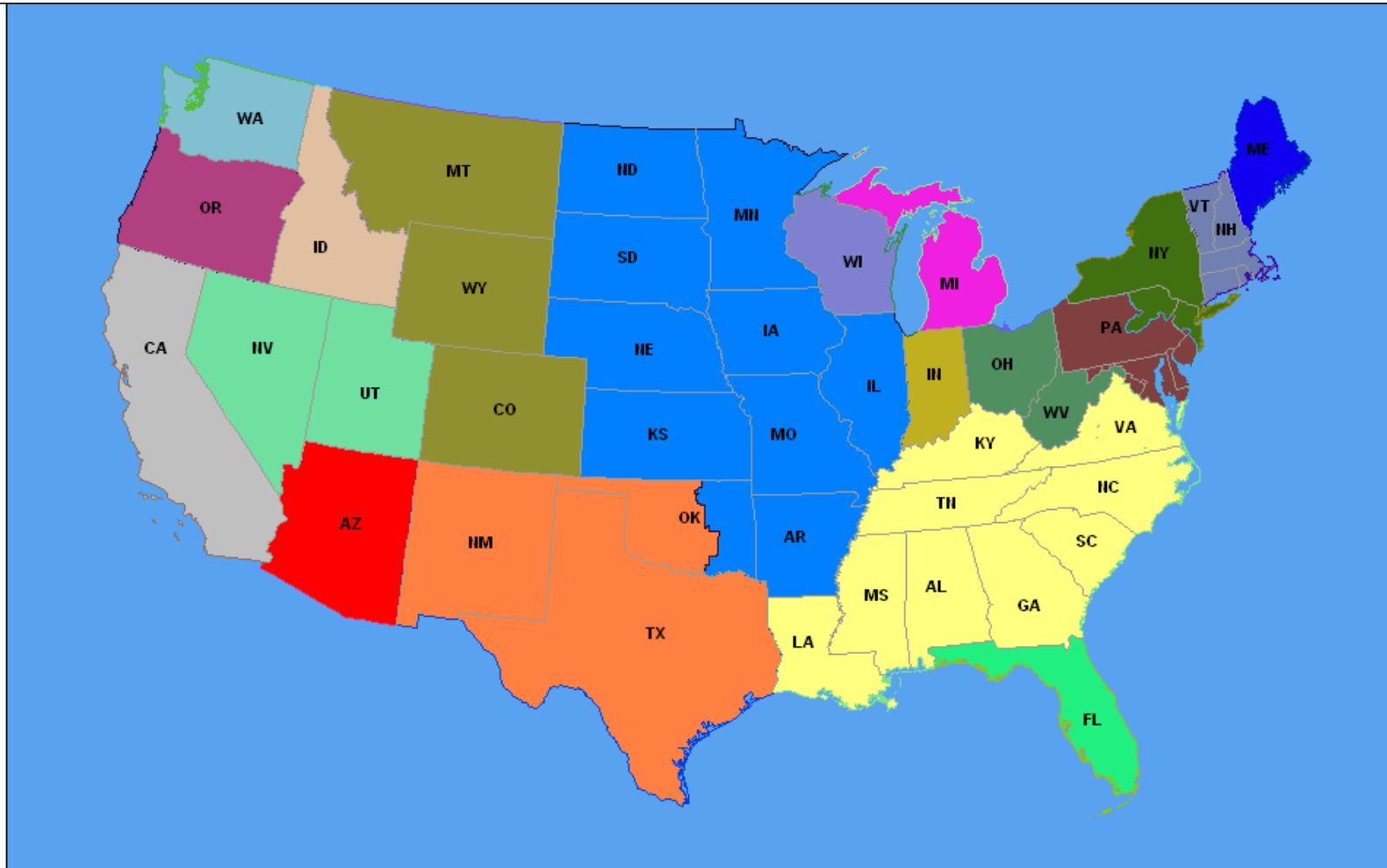
Total Dairy Promotion Funding



State & Regional Map



- State Borders
- Territories
- ADA MidEast
- ADADC, Inc
- Arizona Milk Producers
- California Milk Advisory Bd
- DairyMAX
- Florida Dairy Farmers
- Maine Dairy Promotion Board
- Mid Atlantic Dairy Assoc.
- Midwest Dairy Association
- Milk Promotion Services, Inc
- Mountain West Dairy Promotion
- New England Dairy Promotion Board
- Oregon Dairy Products Commission
- SUDIA
- United Dairy Industry of Michigan
- United Dairymen of ID
- WA St. Dairy Products Commission
- Western Dairy Association
- Wisconsin Milk Marketing Board
- States



Dairy Farmer Priorities

Dairy Industry Leadership

DMG DAIRY MANAGEMENT INC.™
AMERICAN DAIRY ASSOCIATION NATIONAL DAIRY COUNCIL U.S. DAIRY EXPORT COUNCIL

DAIRY RESEARCH INSTITUTE™
NUTRITION • PRODUCTS • SUSTAINABILITY

USA U.S. Dairy
Export Council.
Ingredients | Products | Global Markets



INNOVATION
CENTER FOR U.S. DAIRY.

Health & Wellness

Globalization

Consumer Confidence

Food Safety

Research & Insights

Sustainability

Dairy Industry Information Pipeline



Many Consumers are Interested in Protein

- 97% of US consumers are aware of protein and its benefits compared to 83% in 2008.
- 55% of U.S. consumers express interest in getting more protein in their diets.²
- Nearly half (45%) of consumers look for foods and beverages with a short list of recognizable, minimally processed ingredients.³

1. HealthFocus, 2012
2. IC Protein White Paper
3. NMI Aug 2011



Two Groups are Greatly Influencing Food and Beverage Choices

BOOMERS



Age 49-67

26% of population
76 million people

Distinctions:

- Nearly 30% college grads
- Two-thirds are married
- Participated in great social change
- Highly competitive, motivated
- Motivated by healthy aging

MILLENNIALS



Age 18-37

27% of population
81 million people

Distinctions:

- Racially/ethnically diverse
- Fiercely independent
- Receptive to new ideas
- Interested in how food is grown
- Embrace flavor variety, less processed foods

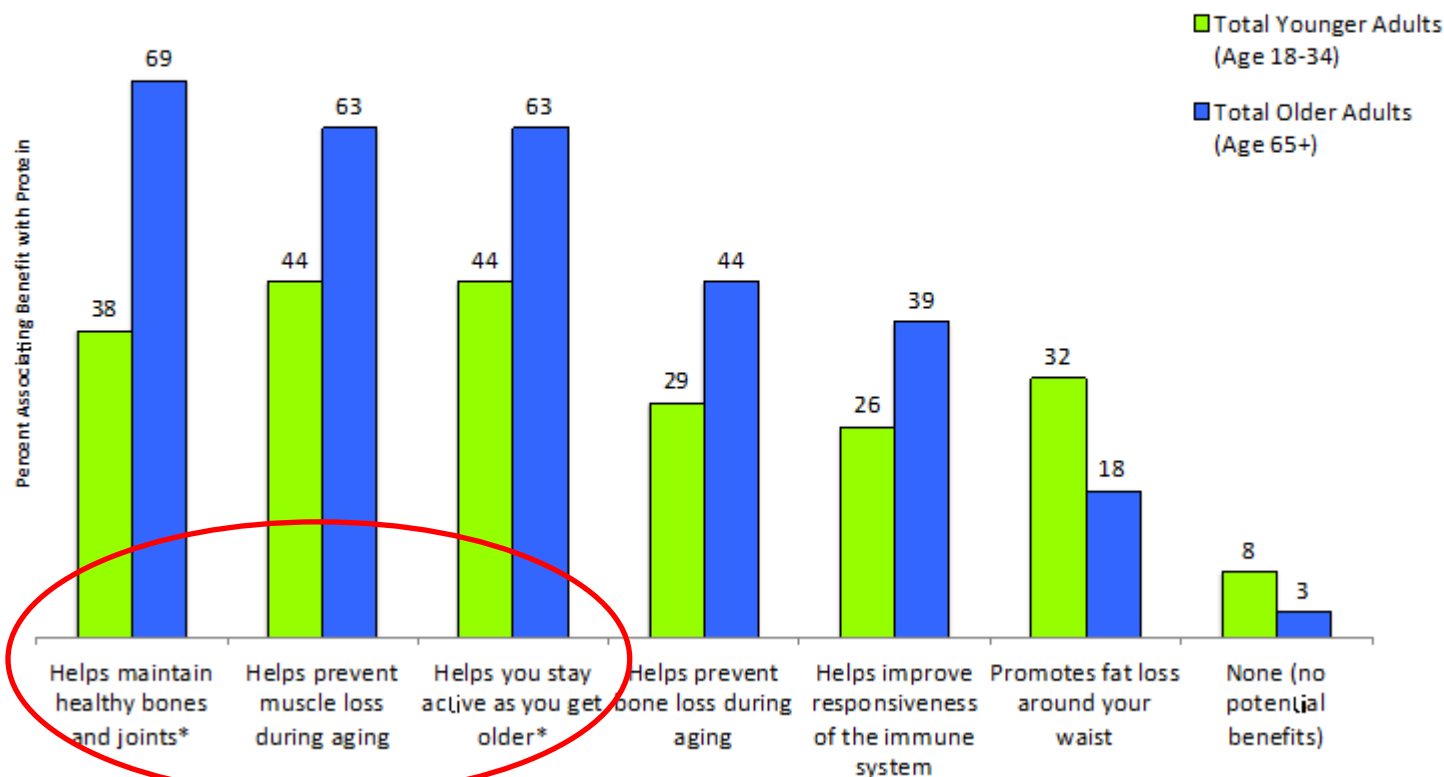
Freedom to Live

Wellness will be defined as quality of life. Concern for longevity and a heightened awareness of the long-term impact of our choices continues to grow and permeate everyday life. Health is no longer a goal in and of itself, but an enabler to enjoy a fulfilled life

70% of consumers believe proper nutrition delays the onset of chronic diseases



Benefits Associated with Protein: Largest Differences Between Older and Younger Adults



Source: DMI 2011 Consumer Protein Tracker Update

Millennials Demand More



Balanced and Real Nutrition



Recovery and Restore



Weight Mgmt/ Curb Hunger



Tasty Pick-Me-Up



Refresh



Sustained Energy



Sweet Dreams



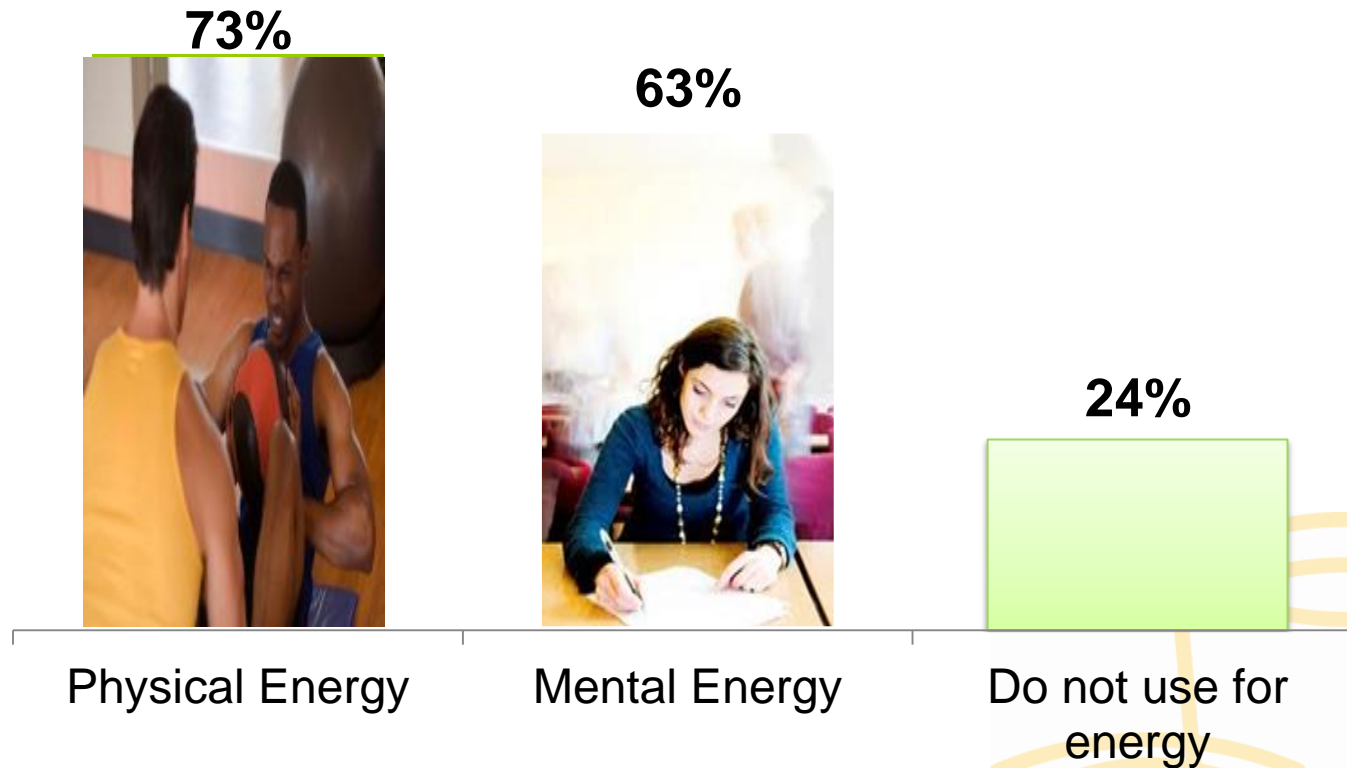
Super Waters



Physical And Mental Energy Are Important

Types of Energy Consumer Are Looking For In Functional Products

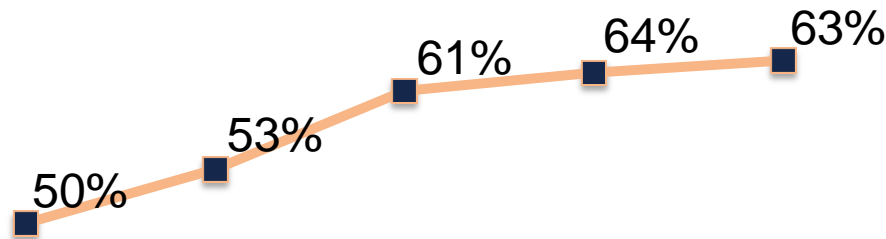
(Foods & Beverages; % of Adult Sample)



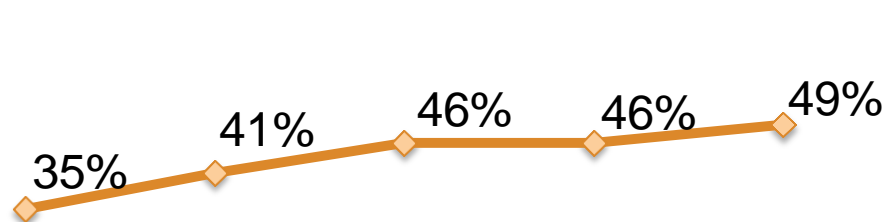
Source: The NPD Group/Functional Foods & Beverages Custom Survey;
June '12

Clean label = recognizable ingredients and minimal processing

Completely/Somewhat Agree-2010




■ I look for foods/beverages with a short list of recognizable ingredients
CAG '06 - '10: +6.0%



◆ I prefer foods that are minimally processed
CAG '06 - '10: +8.5%

2006 2007 2008 2009 2010

Real Food Matters To Both Groups



**36% of adults would rather get
their nutrients from foods and
beverages as opposed to
supplements**

**Natural is a good point of
difference**

Source: The NPD Group/Functional Foods & Beverages Custom Survey;
June '12

Source: Package Facts dietary supplements us 2010 study



Quality Matters



Dairy and Blood Pressure



Report of the
Dietary Guidelines
Advisory Committee
on the
Dietary Guidelines for
Americans, 2010

2010 Dietary Guideline Committee Report

“Conduct randomized controlled trials to answer the question whether intake of dairy products alters blood pressure”

Result

Hypotensive effects of dairy

Tanaka – Texas (*published*)

Effect of a higher fat DASH diet plan on blood pressure

Krauss – Oakland Research Institute (*completed*)

Effects of low-fat dairy intake on blood pressure and vessel function

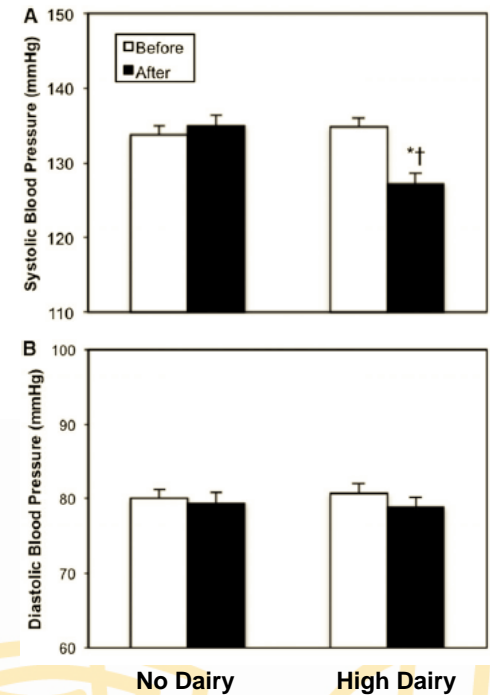
Macki – Provident Clinical Research (*published*)

Low-fat milk and blood vessel function

Bruno – Ohio State (*published*)

Dairy and blood pressure – a fresh look at the evidence

Cifelli and Park – DMI (*published*)



Effects of Whey Protein and Resistance Exercise on Body Composition: A Meta-Analysis of Randomized Controlled Trials

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Key words: whey protein, body composition, meta-analysis, randomized controlled trials, exercise



Objective: The objective of the present meta-analysis was to examine the effect of whey protein (WP) with resistance exercise, on body weight and body composition in randomized controlled trials (RCTs) in generally healthy adult study populations.

A comprehensive literature search was conducted to identify RCTs that investigated WP consumption (hydrolyzed and body weight, body mass index (BMI), body fat, lean body mass (LBM), fat-free mass, waist circumference). Random effects meta-analyses were conducted to generate weighted group means (WGMs) for between-group comparisons (WP vs other protein sources or carbohydrates) and WP comparisons (i.e., differences from baseline to trial end). Studies were classified into 2 distinct categories: a supplement without dietary modification (WPS) and WP as a replacement for other sources (WP-R) and were meta-analyzed separately. Subgroup analyses included examining the effect of dose and type of WP on the relationship between WP and body composition.

Forty-two RCTs were included, with a total of 626 adult study completers. Five studies examined WP-R and the remaining 37 studies examined the effects of WPS. Body weight (WGM: +4.20 kg, 95% CI: -7.62, +16.02) and body fat (WGM: -1.24 kg, 95% CI: -5.98, +3.50) were increased from baseline in the WPS within-group analyses. In the between-group analyses, the WPS were more favorable when compared with carbohydrates than protein sources other than whey, but did not reach statistical significance. Results from the subgroup analyses indicated a statistically significant increase in LBM (WGM: 2.24 kg, 95% CI: 0.66, 3.81) among studies that included a resistance training program along with WP provision.

Conclusion: The current body of literature supports the use of WP, either as a supplement combined with resistance exercise or as part of a weight loss or weight maintenance diet, to improve body composition parameters.

When considered in context of overall dietary patterns, some individual food groups or other dietary constituents have received considerable attention for their potentially favorable influence on satiety, energy balance, body weight, and body composition [5-8]. Dairy products are one such food group [8]; however, findings from RCTs examining dairy products and body composition have been mixed. These inconsistent findings may be attributable to the heterogeneous nature of the dairy food group. Individual dairy foods contain variable levels of nutrients and other components; thus, considering dairy products as one single exposure is challenged by this heterogeneity. Examining specific constituents of dairy products may be important because it could

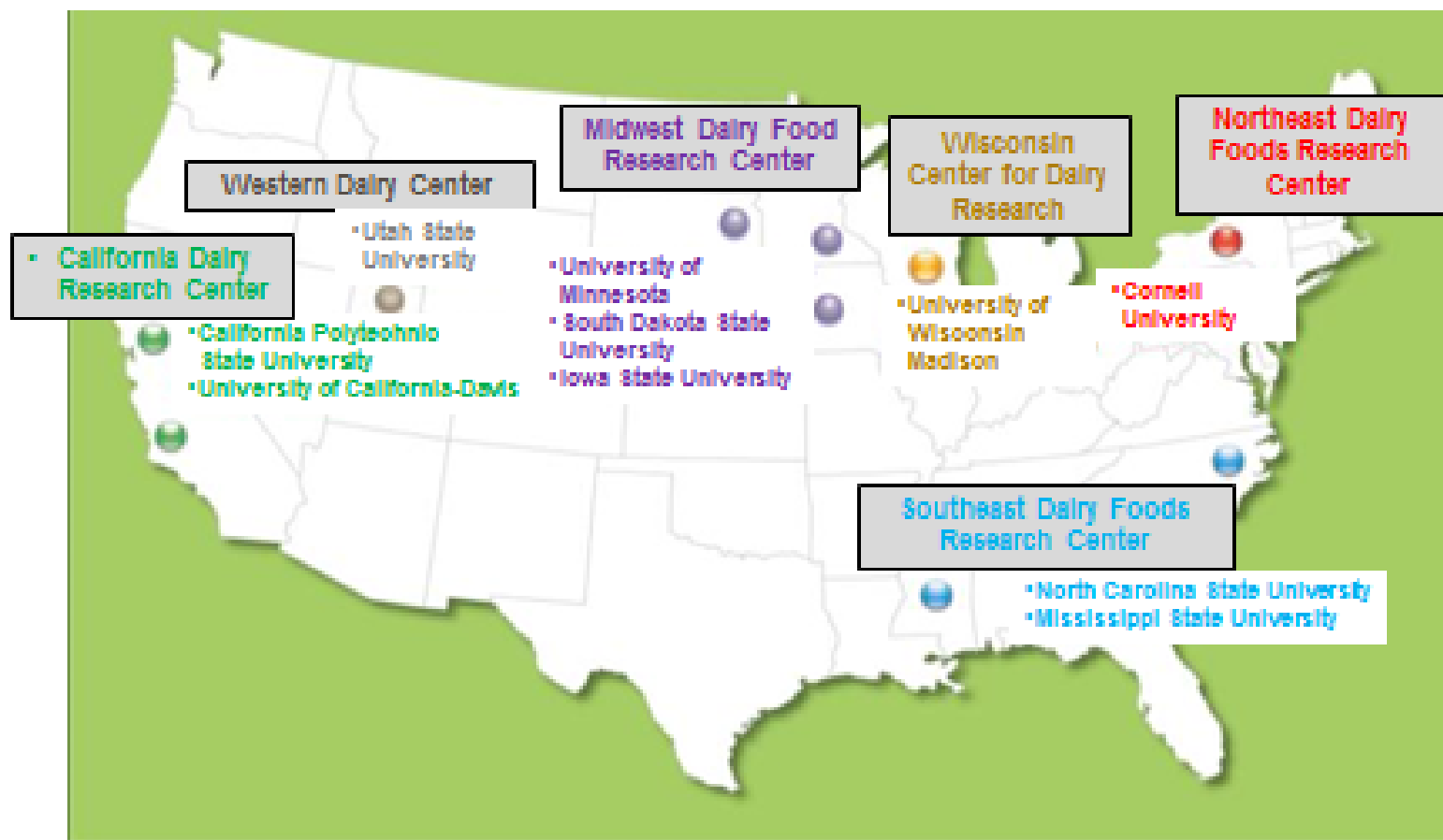


The Effects of Whey Protein on Body Composition: A Meta-Analysis of Randomized Controlled Trials

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Exponent Inc., Health Sciences, Chicago, IL, Boulder, CO.

Educational Resources found at www.wheyconsortium.org/meta-analysis

DRI supports the Dairy Center Program with funding for research and staffing at top universities across the U.S.



Developing New Protein Product Concepts to Meet Consumer Needs



Lentil Power Soup

- Over half (55%) of adults say they'd like to consume more protein and this satisfying soup can help meet that goal.¹
- A protein-enriched soup is the most requested protein-enriched food among primary grocery shoppers.²
- Contains dairy protein sources micellar casein concentrate, milk protein concentrate and whey permeate.



20g (40% Daily Value) protein and 35% Daily Value of calcium per 240ml serving

1. Source: NPD Group/NET In-Home Database, Year Ending 2011
2. NPD Group, February 2014

Veggie Burst



- This high protein, clean label juice is refreshing after a workout or as a snack.
- A high protein diet promotes both exercise recovery and muscle maintenance with aging.
- Nearly 6 of 10 Americans consider protein content when buying food or beverages.¹
- Juice and vegetable juice drinks comprise nearly 43% of new global drink launches.²
- This excellent protein source contains dairy ingredients whey protein isolate and milk minerals which contribute to the clean label.

1. 2012 survey from the International Food Information Council
2. Innova, *Vegetables & Spices Rev Up Juice & Juice Drinks*, June 2013



12g (24% Daily Value) protein and 30% Daily Value of calcium per 240 ml serving

Poutine-inspired Cheese Dippers

- This convenient snack can help consumers get important nutrients throughout the day.
- Protein is linked to satiety, overall 97% of U.S. consumers are aware of protein and it's benefits.¹
- The U.S. is a global leader in cheese production with 450% growth since 2000.
- No consistent evidence that higher dairy intake causes cardiovascular disease exists.²



15g protein per 85g serving

- Contains MPC 80, nonfat dry milk, whey permeate, WPC 80, butter and natural cheese.

1. Innova Database. *Snacks Revolution*. July 2013
2. Dairy Research Institute. *Milkfat and Heart Health*. 2012.

Online Resources

Website

Innovatewithdairy.com

Midwestdairy.com

midwestdairy.umn.edu/Research

Dairyingredientprocessing.com

Usdec.org

Usdairy.com

Nationaldairycouncil.org

Audience

Food scientists, formulators

Midwest Dairy Association

MDFRC Center Members

Dairy and food industry

USDEC members, industry

Entire food industry

Consumers-all

