



## Typical O2P™ Powder Applications

**O2P™** powders can be used in a wide range of food, nutraceutical, cosmetic, pet food and animal nutrition products.

Until O2P, many dry mixes, beverage and other food applications could not incorporate the nutritional or medicinal significance of many bio-actives that could only be found in oil, paste, gel or other semi-solid form.

As nutraceuticals, many were only available in soft gelatin capsules, despite concerns over BSE contamination and limited appeal as many consumers, particularly children and older adults, find soft gelatin capsules difficult to swallow.

O2P Powders now provide food marketers the ability to offer functionality in addition to nutrition. Nutraceutical producers can now offer safer alternatives such as tablets or caplets.

Below are just a few of the applications using O2P to fortify, enrich or expand product use in several market segments:

### Food

- Omega-3 ALA fortification in bread, roll, cake and cookie dry mixes
- Similar fortification in icings or fillings
- CLA fortification in powdered milk, yogurts, dairy drinks and ice cream novelties
- Omega-3 DHA and/or EPA fortification in instant cocoa, lemonade or other powder drink mixes
- Omega-3 DHA and AA (Arachidonic Acid) fortification in dry infant formula
- Omega-3 DHA fortification in nutrition drinks for seniors
- Powdered butter for microwave popcorn
- Coconut, apricot, bitter orange extract for flavorings in food
- Dry coconut powder vs. liquid in ice cream novelties
- Almond, wheat germ, sesame for improved flavor profile in breads
- Malt lager as a browning agent on breads
- CLA, MCT, adrenal extracts, or glycerin using a whey or soya protein carrier matrix in protein shakes and other sports nutrition drinks
- CLA, MCTs, Vitamin E, omega-3s in protein or energy bars
- Omega-3-6-9 with MCT and Vitamin E in cereal fortification
- MCTs as a trans-free replacement to vegetable oils
- Omega-3 ALA powder with pectin for cholesterol reduction
- Omegas-3-6-8 fortification in any powder beverage, dry mix or other prepared food
- GLA as an immune system booster in kids cereals and powder drink mixes
- Olive oil powder in breads for taste, omega fortification
- Vitamin E, beta carotene, raspberry or other antioxidants for immune boosting in baked goods, cereals, shakes
- Chicken, beef or lard fat oil powder for use as a dry soup base in instant noodles
- High concentrate spice oil powders to enrich smell, taste profile in spices
- Powdered food coloring extracts for dry food coloring

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### Food (cont'd)

- Omega-3 DHA in margarine
- Omega-3, 6 and/or 9 fortification in powdered meal replacements
- Powdered honey as a flavoring in cereals, breads, instant tea and other powder drinks

### Cosmetic – Body Care

- Aloe vera liquid onto a talc carrier matrix in baby powder
- Vitamin E onto talc for similar use
- Combination of aloe and Vitamin E on talc
- Embedding the above combination into a disposable diaper liner
- Vitamin E as an anti-oxidant in powder based cosmetics, lip balms
- Vitamin E, GLA or CLA in sugar, coffee or cocoa rubs
- Vitamin E, GLA or omega-3s on sea salt in body scrubs

### Nutraceutical

- A multi-omega (omega-3,6,7,9) tablet or capsule
- Powdered lutein ester tablet or capsule as part of eye care formula
- Tablet or capsule forms of Vitamin E for nutraceuticals/dietary supplements
- Diglyceride CLA and MCT in slimming tablets, capsules, sachets
- Tablet or encapsulated ALA
- Tablet or encapsulated GLA
- High-concentrated tablet or encapsulated DHA, EPA, DHA/EPA

### Pet Food and Animal Feed

- Fish oil powder for enhanced smell characteristic in cat food
- GLA or Vitamin E fortification for immune boosting
- Fish oil powder for coat, skin health
- Most any omega-3 DHA, omega-6 GLA or omega-9 for food fortification, similar to human fortification
- “Yellow grease” powder as an animal feed fattening agent

### Miscellaneous

- Vegetable oil powder for use in plant and lawn insect control products

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