

THE USE OF WHEY OR SKIMMED MILK POWDER IN FORTIFIED BLENDED FOODS FOR VULNERABLE GROUPS

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ABSTRACT

Fortified blended foods (FBF), especially corn soy blend, are used as food aid for millions of people worldwide, especially malnourished individuals and vulnerable groups. There are only a few studies evaluating the effect of FBF on health outcomes, and the potential negative effect of antinutrients has not been examined. Different lines of evidence suggest that dairy proteins have beneficial effects on vulnerable groups. Here we review the evidence on the effects of adding whey or skimmed milk powder to FBF used for malnourished infants and young children or people living with HIV or AIDS. Adding whey or skimmed milk powder to FBF improves the protein quality, allowing a reduction in total amount of protein, which could have potential metabolic advantages. It also allows for a reduced content of soy and cereal and thereby a reduction of potential antinutrients. It is possible that adding milk could improve weight gain, linear growth, and recovery from malnutrition, but this needs to be confirmed. Bioactive factors in whey might have beneficial effects on the immune system and muscle synthesis, but evidence from vulnerable groups is lacking. Milk proteins will improve flavor, which is important for acceptability in vulnerable groups. The most important disadvantage is a considerable increase in price. Adding 10-15% milk powder would double the price, which means that such a product should be used only in well-defined vulnerable groups with special needs. The potential beneficial effects of adding milk protein and lack of evidence in vulnerable groups call for randomized intervention studies.