



Ain Shams University
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Using Modified Whey Supplemented with Some Kinds of Milk for Production Infant Milk

THESIS

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Abstract

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The present study aimed to investigate the using of sweet whey (SW) as by-product of cheese process after it's fermented by *bifidobacteria* fermented sweet whey (FSW) with cow milk and/or camel milk to produce new milk infant formula to enhance immunity and more economy. Then FSW was mixed with (1:1, 1:2 and 2:1) both cow and camel milk. Then using male albino rats, which fed on commercial infant formula, SW, FSW, cow milk, camel milk and mixture FSW with camel milk or/and cow milk. It should be notated that rats ingest 2ml/day from the previous infant formula. The experimental period was 45 days. The blood samples were collected and analysis such as (blood glucose, lipid profile, liver function, kidney function and immunity). Blood profile was measurement too. Results: generally, the rats fed on basal diet only had the lowest level of body weight gain (BWG). Fermented whey mixed with cow/camel milk improvement protein digestion and antioxidant, blood and lipid profile, liver function, kidney function, blood glucose and all groups treated with different fermented formulae tended to have enhancing in IgA and IgG.

Key words: Modified whey, Fermentation, cow milk, camel milk, liver function, lipid profile, Immunity, Blood profile, Bioavailability of protein.

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