

Ontario Department of Agriculture

ONTARIO AGRICULTURAL COLLEGE

Food Value of Milk and Its Products

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If the true nutritive value of milk and its various products were fully realized they would be more appreciated and much more freely used. They are cheap, palatable, easily digested, and highly nutritious. Excepting in the case of milk, and then only in the case of infants and invalids, they are rarely used as an article of the diet, but are regarded as a luxury to be used as a condiment. They are, however, foods of exceptionally high value, and can very profitably be made to take a more prominent place in our dietaries.

FOOD AND ITS FUNCTIONS.

A food may be considered anything that when taken into the body will build up its tissues and keep them in repair, or which is consumed in the body to yield force and heat. It is used to form the tissues and fluids of the body, such as muscle, blood and bone, to repair their waste, and, if in excess of the daily requirements, it may be stored in the body in the form of fat for future use. When food or body tissue is consumed in the system, the energy contained therein becomes active and manifests itself in the force or heat required by the body.

To be a complete food it must contain all the constituents required by the healthy growing animal. These are protein, fat, carbohydrates and mineral matter. The protein compounds are necessary for the building up of new and the repairing of the old tissue. When eaten in excess of what is thus needed they may be simply burned to produce force. The body tissue when broken down also yields energy. Familiar examples of protein are lean meat, white of egg, casein of milk and cheese and gluten of wheat. The fats and carbohydrates are used as a source of energy, and when eaten in excess of this requirement may be transformed into fat in the body. Fat is found in meat, lard, milk, oils; and the starches, sugars and woody fibre or cellulose form the bulk of the carbohydrates. The mineral matter of a food is absolutely essential for the formation of bone, and is also present in the tissues and fluids of the body.