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原著

免疫応答に及ぼす脂肪食の影響

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Effect of Fatty Diet on Immune Response of Rats

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Abstract

SD rats were divided into 4 groups, fed with the fish oil, safflower oil, butter and lard diets through 45 days, respectively. The body weight and the fatty acid composition in the serum of each rat was measured. Immune responses were observed by the hemagglutination and the passive cutaneous anaphylaxis tests. The rats fed with the fish oil diet showed the highest body weight, and the rats fed with the butter diet the lowest one. The fatty acid composition in serum was well in agreement with that in the oil diet. Inflammation tested by the passive cutaneous anaphylaxis showed no difference according to the diet specification. The immune responses tested by the hemagglutination in the fish oil diet group were significantly higher than in the other groups.

要 約

SD ラットを4群に分け，それぞれ魚油，サフラワー油，バターおよびラード食を45日間投与した．体重増加率，血清脂肪酸組成を測定した．次いで，羊赤血球抗体に対する抗体価および受身皮膚アナフィラキシーテストによる炎症反応を調べた．体重増加率は魚油食ラットが最も高く，バター食ラットが最も低かった．血清中の脂肪酸組成は餌の脂肪酸組成をよく反映したものであった．受身皮膚アナフィラキシーテストによる炎症反応は，脂肪食によって影響されず，魚油食ラットの赤血球凝集反応による抗体価は，他の脂肪食ラットに比べて有意に高値を示した．