

they are from freshwater or estuarine origin because organisms from those places tend to have significantly higher n-6HUFA than those from marine origin^[15].

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不同脂肪源对褶皱臂尾轮虫脂类和脂肪酸组成的影响

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摘 要:以褶皱臂尾轮虫(*Brachionus plicatilis*)为实验动物并设计不同脂肪源饵料,分别为:面包酵母 *Saccharomyces cerevisiae* (对照组),微绿球藻 *Nannochloropsis oculata* (A), 5%大豆磷脂+5%鱼油+90%面包酵母(B), 10%鱼油+90%面包酵母(C)。结果表明:(1)接受不同脂肪源的轮虫的脂肪酸组成显著不同,尤其是高度不饱和脂肪酸(HUFA, 20C)含量存在显著差异,说明饵料中 HUFA 含量对轮虫体内相应脂肪酸的含量有显著影响。投喂饵料 C 的轮虫具有高含量的 n-3HUFA(26.7%),而对照组轮虫的 n-3HUFA 只有 7.56%,所以投喂饵料 C 使轮虫的脂类 HUFA 水平得到了强化,提高了轮虫的营养价值。(2)轮虫脂类的 HUFA 水平不仅由饵料中脂类的相应脂肪酸组成决定,而且轮虫脂类 HUFA 的提高和强化效果与饵料中 HUFA 的化学形态密切相关。甘油三酯型饵料 HUFA 的强化轮虫效果高于磷脂型的 HUFA。(3)将富含 HUFA 的鱼油直接添加在干性饵料如面包酵母中,而不是通过对鱼油乳化后直接强化轮虫,同样能取得良好的强化效果,且操作简便,不易污染水质,适用于轮虫的规模生产。

关键词:褶皱臂尾轮虫;饵料脂肪源;脂肪酸组成