

BAB 5

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan studi literatur yang telah dilakukan dan hasil analisis data yang didapatkan maka dapat diambil kesimpulan:

1. Pemberian lemak rantai sedang (MCT) dapat menurunkan kadar kolesterol dengan beberapa mekanisme yaitu (1) dengan meningkatkan oksidasi lemak dengan meningkatkan aktivitas enzim lipolitik hati acyl-CoA oxidase (ACO), (2) menurunkan aktivitas HMG-CoA, (3) Meningkatkan ekskresi feses, (4) meningkatkan regulasi ekspresi hati ABCA1, ABCG8, SR-BI, CYP7A1, dan ekspresi usus ABCG8 serta menurunkan regulasi ekspresi usus NPC1L1.
2. Pemberian lemak rantai sedang (MCT) dapat menurunkan kadar gula darah dengan beberapa mekanisme yaitu (1) menurunkan konsentrasi insulin plasma, (2) meningkatkan konsentrasi badan keton darah.
3. Pemberian serat pangan dapat menurunkan kadar kolesterol dengan beberapa mekanisme yaitu (1) menurunkan kadar Malondialdehid dalam serum dan di hati, (2) menghambat pencernaan dan penyerapan lemak makanan, (3) mengikat asam empedu dan mengganggu sirkulasi enterohepatic garam empedu.
4. Pemberian serat pangan dapat menurunkan kadar gula darah dengan beberapa mekanisme yaitu (1) meningkatkan fermentasi serat oleh bakteri usus, (2) meningkatkan sensitivitas insulin, (3) meningkatkan viskositas isi lambung dan usus.

5. Pemberian lemak rantai sedang (MCT) dan serat pangan dapat menurunkan kadar gula darah karena MCT dan serat pangan dapat meningkatkan sensitivitas insulin sehingga dapat meningkatkan penyerapan glukosa oleh sel.
6. Pemberiaan lemak rantai sedang (MCT) dan serat pangan dapat menurunkan kadar kolesterol karena MCT dan serat pangan dapat meningkatkan oksidasi lemak, sehingga menurunkan substrat pembentuk kolesterol, meningkatkan ekskresi asam empedu sehingga dapat menurunkan penyerapan lemak.

5.2 Saran

1. Perlu dilakukan penelitian klinis lebih lanjut tentang efek dari pemberian MCT dalam menurunkan kadar gula darah dan kadar kolesterol.
2. Perlu dilakukan penelitian klinis lebih lanjut tentang efek dari pemberian serat pangan dalam menurunkan kadar gula darah dan kadar kolesterol.
3. Perlu dilakukan penelitian pre-klinis lebih lanjut tentang efek dari pemberian kombinasi MCT dan serat pangan dalam menurunkan kadar gula darah dan kadar kolesterol.

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