

Table 1: Completed Ketogenic Diet Intervention and Cancer Clinical Trials Overview

Trial ID	Name	Design	N (enrolled)	N (completed)	Cancer Type	Diet	Length	Concurrent Treatment
NCT03171506	Targeted Disruption to Cancer Metabolism Through Dietary Macronutrient Modification	RCT	n=73: n=36 (control), n=37 (KD)	n=45: n=20 (control), n=25 (KD)	Ovarian, Endometrial	KD: 70%:25%:5% [fat:protein:CHO]	12 weeks	Chemotherapy: control (n=4), KD (n=7)
IRCT20171105037259N2	Effect of Ketogenic diet on patients with locally advanced and metastatic breast cancer	RCT	n=80: n=40 (control), n=40 (KD)	n=60: n=30 (control), n=30 (KD)	Breast	KD: 55%:19%:6% [fat:protein:CHO], 20% from MCT	12 weeks	Chemotherapy
NCT03535701	Ketogenic Diet and Chemotherapy to Affect Recurrence of Breast Cancer (The KETO-CARE Study)	Parallel Assignment	n=20	n=17: n=15 (phase 1), n=9 (phase 2)	Breast	WFKD: 20-25 g/day CHO, 1.2-1.5 g protein/kg reference weight, dietary fat to satiety	6 months: 3 months (phase 1), 3 months (phase 2)	Chemotherapy
NCT01716468	A Low-Carbohydrate Diet for Advanced or Metastatic Cancer	Single Group Assignment	n=11	n=6 (8 weeks), n = 4 (16 weeks), n=3 (≥16 weeks)	Prostate, Skin, Renal cell, Pancreatic, Colon, Thyroid, Head and Neck, Lung	MAD: 20-40 g/day CHO	4-16 weeks	None
NCT03075514	Ketogenic Diets as an Adjuvant Therapy in Glioblastoma: A Randomized Pilot Trial	Parallel Assignment (randomized)	n=12: n=6 (MCTKD), n=6 (MKD))	n=4 (12 weeks): n=3 (MCTKD), n=1 (MKD). n=3 (12 months): n=2 (MCTKD), n=1 (MKD)	Glioblastoma multiforme	MKD: 80% fat, 5% CHO. MCTKD: 75% fat (30% via MCT), 10% CHO	12 weeks/12 months	Chemoradiation
N/A	The Impact of a Ketogenic Dietary Intervention on the Quality of Life of Stage II and III Cancer Patients: A Randomized Controlled Trial in the Caribbean	RCT	n=40: n=20 (control), n=20 (KD)	n=36: n=20 (control), n=16 (KD)	Breast, Prostate, Colon/rectal, Cervical, Lung	MKD: 75%15%:10% [fat:protein:CHO]	16 weeks	Chemotherapy or Radiotherapy
N/A	Effects of a ketogenic diet on the quality of life in 16 patients with advanced cancer: A pilot trial	Single Group Assignment	n=16	n=5 (completed intervention), n=7 (included in analysis)	Ovarian, Esophagus, Pancreatic, Thyroid, Colon	KD: <70 g/day CHO. Oil protein/fat shake (21g:14g:5g) (fat:protein:CHO), 2 times daily	12 weeks	None
NCT00444054	Pilot Feasibility Study Of A Low Carbohydrate Diet In Patients With Advanced Cancer	Single Group Assignment	n=12	n=10	Breast, Fallopian tube, Colorectum, Lung, Esophagus, Ovarian	IID: <5% CHO for energy intake	26-28 days	None

NCT01865162/NCT02302235	Ketogenic Diet as Adjunctive Treatment in Refractory/End-stage Glioblastoma Multiforme: a Pilot Study/Ketogenic Diet Treatment Adjunctive to Radiation and Chemotherapy in Glioblastoma Multiforme: a Pilot Study	Single Group Assignment	n=8: n=4 (newly diagnosed GBM), n=4 (recurrent GBM)	n=5: n=4 (newly diagnosed GBM), n=1 (recurrent GBM)	Glioblastoma multiforme	KD: 4:1 [fat:protein+CHO], 10 g/day CHO	6 months	Chemoradiation
NTR5167	Ketogenic diet treatment as adjuvant to standard treatment of glioblastoma multiforme: a feasibility and safety study	Single Group Assignment	n=9	n=6	Glioblastoma multiforme	KD: 4:1 [fat:protein+CHO] fluid (6 weeks), 1.5-2:1 KD [fat:protein+CHO] w/ 70% MCT supplement (6 weeks)	14 weeks	Chemoradiation
NCT00575146	Ketogenic Diet for Patients With Recurrent Glioblastoma	Single Group Assignment	n=20	n=17	Glioblastoma multiforme	KD: <60 g/day CHO, Highly fermented yogurt (500 mL/day), Plant oils (basic and addition oils)	12-32 weeks	Chemotherapy
NCT02516501	Investigating the Impact of a Ketogenic Diet Intervention During Radiotherapy on Body Composition: A Pilot Trial	Parallel Assignment	n=63: n=31 (control), n=32 (KD)	n=59: n=30 (control), n=29 (KD)	Breast	KD: 75-85% fat, <50 g/day CHO, 10 g/meal CHO	35 days (median study duration in KD group), 19-47 days (range)	Radiotherapy
NCT02516501	Investigating the Impact of a Ketogenic Diet Intervention During Radiotherapy on Body Composition: A Pilot Trial	Parallel Assignment	n=49: n=25 (control), n=24 (KD)	n=41: n=23 (control), n=18 (KD)	Rectal	KD: ≤50 g/day CHO	37 days (median study duration in KD group), 31-43 days (range)	Chemoradiation
NCT02516501	Investigating the Impact of a Ketogenic Diet Intervention During Radiotherapy on Body Composition: A Pilot Trial	Parallel Assignment	n=32: n=21 (control), n=11 (KD)	n=28: n=21 (control), n=7 (KD)	Head and neck	KD: ≤50 g/day CHO	39 days (median study duration in KD group), 35-46 days (range)	Chemoradiation
NCT04631445	Randomized Phase II Trial of Two Different Nutritional Approaches for Patients Receiving Treatment for Their	RCT	n=32: n=16 (control), n=16 (KD)	N/A	Pancreatic	MSKD: not specified	N/A	Chemotherapy

	Advanced Pancreatic Cancer							
NCT02286167	The Feasibility and Biologic Effect of a Modified Atkins-based Intermittent Fasting Diet in Patients With Glioblastoma (GBM)	Single Group Assignment	n=25	n=21	Glioma	MAD: ≤ 50 g CHO, 20% of recommended daily caloric intake (5 days); KD: 4:1 [fat:protein+CHO] liquid (KetoCal drink) (2 days, nonconsecutive fasting)	8 weeks	None
NCT03194516	A Ketogenic Diet Pilot Study for Overweight Prostate Cancer Patients on Active Surveillance	Single Group Assignment	n=10	n=10	Prostate	KD: 3:1 [fat:protein+CHO]	8 weeks	None
NCT02092753	Ketogenic Or LOGI Diet In a Breast Cancer Rehabilitation Intervention (KOLIBRI)	Parallel Assignment	n=153: n=30 (control), n=93 (LCD), n=30 (KD)	n=121: n=25 (control), n=76 (LCD), n=20 (KD)	Breast	KD: 75% fat, 1.4g/kg /day body weight protein, 20-30 g/day CHO	20 weeks	None
NCT01092247	The Effect of Ketogenic Diet on Malignant Tumors-Recurrence and Progress	Parallel Assignment	n=9: n=4 (control), n=5 (KD)	n=9: n=4 (control), n=5 (KD)	Glioblastoma multiforme, Gliomatosis cerebri	KD: 4:1 [fat:protein+CHO]	2-31 months	Bevacizumab
NCT02964806	The Potential Use of a Ketogenic Diet in Pancreatobiliary Cancer Patients After Pancreatectomy	Crossover Assignment	n=30: n=10 (control), n=20 (KD)	n=19: n=9 (control), n=10 (KD)	Pancreatobiliary	KD: 1.05-1.75:1 [fat:protein+CHO]	~1 month	None

LCD=low carbohydrate diet

MSKD=medically supervised ketogenic diet

IID=insulin-inhibiting diet

MCTKD=medium-chain triglyceride ketogenic diet

MKD=modified ketogenic diet

MAD=modified Atkins diet

WFKD=well-formulated ketogenic diet

KD=ketogetic diet

RCT=randomized controlled trial