

**Supplementary Table 1.** Search strategy in Medline through PubMed

1.	“Diet, Carbohydrate-Restricted” [Mesh]
2.	(Diet [TIAB] OR diets [TIAB] OR dietary [TIAB]) AND ((carbohydrate [TIAB] OR carbohydrates [TIAB]) AND (Restricted [TIAB] OR low [TIAB] OR restriction [TIAB] OR restrictive [TIAB] OR reducing [TIAB] OR reduction [TIAB] OR modification [TIAB] OR modifications [TIAB]))
3.	(Diet [TIAB] OR diets [TIAB]) AND Ketogenic [TIAB]
4.	(Intermittent [TIAB] OR “time restricted” [TIAB] OR Alternate [TIAB] OR periodic [TIAB] OR ramadan [TIAB]) AND (Fasting [TIAB] OR energy [TIAB] OR feeding [TIAB] OR diet [TIAB] OR diets [TIAB] OR meal [TIAB] OR eating [TIAB] OR caloric [TIAB] OR calorie [TIAB])
5.	“meal skipping” [TIAB] OR “meal frequency” [TIAB]
6.	1-5/OR
7.	6 AND (groups [tiab] OR trial [TIAB] OR randomly [TIAB] OR placebo [TIAB] OR randomized [TIAB] OR “controlled clinical trial” [PT] OR “randomized controlled trial” [PT]) NOT (animals [MH] NOT (humans [MH] AND animals [MH]))
8.	7 AND Filters applied: from 2000/1/1–2021/6/8
9.	8 NOT “review” [Publication Type] OR “review literature as topic” [MeSH Terms]
10.	9 NOT (meta-analysis [Filter] OR systematic review [Filter])

**Supplementary Table 2.** The framework of PICO in developing the focused question

PICO	Description of detail
Population (P)	<ul style="list-style-type: none"> <li>• Obese or overweight adults (BMI <math>\geq 23</math> kg/m<sup>2</sup>) or</li> <li>• Patients with T2DM or</li> <li>• Patients with hypertension</li> </ul>
Intervention (I)	<ul style="list-style-type: none"> <li>• PICO1: carbohydrate-restricted diets: moderately-low, low, very-low carbohydrate diet or</li> <li>• PICO2: intermittent fasting: time-restriction eating, alternate-day fasting, intermittent energy restriction</li> </ul>
Comparator (C)	Isocaloric diets: standard, calorie-restricted, low-fat, Mediterranean, DASH diets, etc.
Outcome (O)	Body weight, BMI, WC, fat mass, fat-free mass, blood pressure, lipid profile (TC, LDL-C, HDL-C, TG), HbA1c, fasting plasma glucose, fasting plasma insulin, HOMA-IR, CRP, adiponectin, FMD, adverse effects, etc.
Study design (S)	Randomized controlled clinical trials that conducted more than 8 weeks
Target	<ul style="list-style-type: none"> <li>• Obese or overweight adults or</li> <li>• Patients with T2DM or</li> <li>• Patients with hypertension</li> <li>• Healthcare professionals who manage patients with obesity, T2DM, or hypertension</li> </ul>

PICO, population, intervention, comparator, outcome; BMI, body mass index; T2DM, type 2 diabetes mellitus; DASH, dietary approaches to stop hypertension; WC, waist circumference; TC, total cholesterol; LDL-C, low-density lipoprotein cholesterol; HDL-C, high-density lipoprotein cholesterol; TG, triglyceride; HbA1c, glycosylated hemoglobin; HOMA-IR, homeostatic model assessment for insulin resistance; CRP, C-reactive protein; FMD, flow-mediated dilation.