



Interventional Cardiologists' Worst Enemy: The Plant-Based Diet Revolution

Prof. Dasaad Mulijono

Abstract

Despite overwhelming scientific evidence demonstrating the ability of a Plant-Based Diet (PBD) to prevent and even reverse coronary artery disease (CAD), the field of interventional cardiology remains stubbornly fixated on invasive procedures and pharmacological treatments. This resistance persists primarily due to entrenched financial incentives, professional prestige, and a medical culture favouring procedural complexity over preventive simplicity. This provocative article critically examines the systemic barriers preventing widespread adoption of PBD within interventional cardiology, arguing that the real "enemy" is not CAD itself, but rather a healthcare model fundamentally misaligned with patient-centric, preventive medicine.

By integrating Artificial Intelligence (AI) with rigorous nutritional science, Bethsaida Hospital, under the pioneering leadership of Prof. Dasaad Mulijono, presents a groundbreaking blueprint for the future of cardiovascular care. At Bethsaida, the combined use of Drug-Coated Balloon (DCB) therapy and personalized PBD has yielded clinical outcomes previously deemed unattainable—remarkably low restenosis rates, substantial regression of coronary plaques, medication reduction, and reversal of chronic diseases. Prof. Mulijono's innovative strategy effectively challenges the prevailing interventional paradigm, demonstrating that it is both clinically feasible and ethically imperative to shift towards a diet-centred, AI-enhanced model of cardiovascular medicine.

As AI-driven analytics continue to elucidate the undeniable efficacy of plant-based nutrition, traditional interventional cardiology faces an existential threat: adapt and evolve or risk obsolescence. The profound successes achieved at Bethsaida Hospital underscore the power of diet as medicine and highlight a pressing ethical and economic imperative for systemic transformation. The future of cardiology demands a revaluation of professional priorities, placing compassionate, preventive care above procedural profit. Thus, the PBD revolution emerges not as an enemy but as a catalyst to reclaim the heart of medicine.

Keywords: Interventional cardiology; Plant-based diet; Coronary artery disease; Drug-coated balloon; Lifestyle medicine; Financial incentives; Medical prestige; Artificial intelligence; Bethsaida hospital; Prof. Dasaad Mulijono; Healthcare industry

The Clash Between Science and Industry

Forty years have passed since Dr. Dean Ornish and Dr. Caldwell Esselstyn demonstrated that a PBD can reverse CAD [1,2]. Their research demonstrated regression of atherosclerosis, improved endothelial function, and a reduction in cardiovascular events. Yet, due to a lack of financial incentive, the

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interventional cardiology community largely ignores or marginalizes this evidence. Pharmaceutical and medical device companies fund billions of dollars in drug trials and stent research, rather than nutrition-based prevention or reversal studies. As a result, the field remains tied to a system that rewards procedures over prevention.

Groundbreaking research on PBD is often ignored. A prime example is the Mount Abu Open-Heart Trial, conducted by Gupta, et al. in 2011, titled "Regression of Coronary Atherosclerosis Through a Healthy Lifestyle in Patients with CAD" [3]. The study demonstrated significant CAD regression through PBD, stress management, and physical activity. Despite its remarkable findings, it went largely unnoticed by the cardiology community, discouraging young cardiologists from pursuing lifestyle medicine.

Another pivotal study, the ISCHEMIA trial, further underscores the importance of optimal patient management over routine invasive therapy [4]. This large-scale clinical trial failed to show that routine invasive treatment (e.g., stents and bypass surgery) was associated with a reduction in major adverse cardiac events compared to optimal medical therapy among patients with chronic coronary syndrome. The findings suggest that lifestyle intervention and comprehensive medical management should be prioritized, reinforcing the argument that interventional procedures should not be the default treatment for stable CAD. However, despite the trial's implications, many interventional cardiologists resist shifting their focus toward non-invasive approaches. Thus, the ISCHAEMIA trial may become the worst nightmare for many interventional cardiologists.

Furthermore, research by Narula, et al. has highlighted the danger of underdiagnosing vulnerable plaques (VPs), demonstrating that these lesions carry a greater risk than ischemia-driven lesions identified by fractional flow reserve (FFR) [5-7]. At our centre, we postulate that a PBD may stabilize and even regress VPs, potentially explaining why our restenosis and cardiac event rates are among the lowest in the world. Despite such evidence, many cardiologists focus on intervention rather than prevention.

The Prestige Factor: Surgeons vs. Lifestyle Advocates

Dr. Kim A. Williams, past president of the American College of Cardiology, famously stated, "There are two kinds of cardiologists: those who are vegetarian and those who do not read the data." This highlights the disconnect between evidence-based nutrition and mainstream cardiology [8].

In medicine, prestige is often linked to complexity. A doctor who implants a stent is a hero. A surgeon performing bypass surgery is revered. Meanwhile, a physician advising patients to eat more greens? Often dismissed as a "lifestyle doctor," a role that—ironically—can be filled by a non-physician health coach.

This fuels an unspoken hierarchy, where interventionalists dominate while those advocating PBD are marginalized. Financial gain and professional prestige often lead interventional cardiologists to remain reluctant to acknowledge the power of food in combating heart disease.

Who Are They Really Serving?

Most doctors enter medicine to heal. Yet, many become ensnared in a system prioritizing financial gain and professional recognition over patient well-being. Interventional cardiologists thrive in environments where more procedures lead to more tremendous success. The idea that diet could reverse heart disease challenges their expertise and career investment.

If CAD could be prevented and reversed without the need for stents or bypass surgery, what would happen to the careers of interventional cardiologists? Would hospitals still invest millions in catheterization labs? Would pharmaceutical companies continue their sponsorships? The answer is obvious, explaining why many resist the undeniable evidence supporting a PBD.

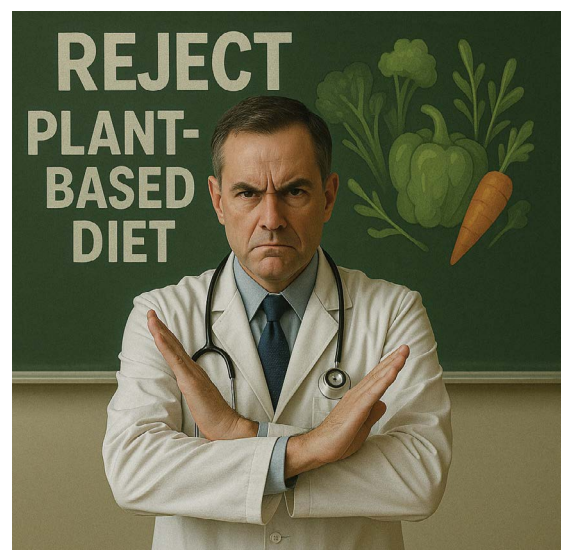


Figure 1: Experience at Our Cardiology Centre, Bethsaida Hospital, Indonesia.

At Bethsaida Hospital, the PBD program was initiated by Prof. Dasaad Mulijono, an interventional cardiologist, based on several key motivations:

1. **Personal Experience:** Prof. Mulijono experienced a regression in his coronary stenosis from 50% to 20% after four years on a PBD.
2. **Patient Outcomes:** He has observed numerous patients achieve reversal of chronic diseases.
3. **Balanced Practice:** He has successfully integrated advanced interventional cardiology procedures with PBD,

demonstrating that this approach does not significantly compromise professional income or reputation.

4. **Ethical Commitment:** Grounded in the Hippocratic Oath and Christian values, he is committed to treating patients with the same care and compassion he would extend to himself, prioritizing effective, patient-centred care [9,10].

In recent years, we have incorporated AI to support patient education, deliver evidence-based nutritional counselling, and design personalized meal plans tailored for individuals with cardiovascular conditions. This approach has improved adherence to PBDs and resulted in significant health benefits.

Prof. Mulijono's latest advancement is the integration of a PBD with drug-coated balloon (DCB) therapy in the management of CAD. This unique combination has yielded a low restenosis rate and demonstrated superior long-term vessel patency. The synergy between optimized lesion preparation, DCB technology, and dietary intervention represents a novel and effective strategy for treating CAD without the need for permanent implants.

At our cardiology centre, we have observed remarkable clinical outcomes:

- Hypertensive patients discontinuing medications following blood pressure normalization.
- Overweight patients achieving a healthy body mass index (BMI) of 21–22.
- Hyperlipidemic patients reducing LDL-C levels to below 30 mg/dL through a combination of PBD, high-intensity statins, and ezetimibe, without the need for PCSK9 inhibitors [11–26], which are expensive and not covered by most private insurance.
- Patients with renal impairment returning to normal serum creatinine levels.
- Diabetic patients achieving HbA1c levels below 6%, with many able to discontinue insulin therapy.
- The lowest restenosis rate in our experience—approximately 2%, accompanied by documented atherosclerotic stabilization and coronary plaque regression.

Despite these promising outcomes, many of our peers, while acknowledging the results, remain hesitant to integrate lifestyle medicine into their practice.

We are committed to contributing to the scientific literature to address this gap, hoping that future clinicians will embrace and propagate this paradigm shift. By integrating lifestyle medicine into mainstream cardiology, we aspire to enhance patient outcomes and effectively combat the growing burden of chronic disease.

The Future: Can AI Fill the Gap?

As AI-driven analytics continue to elucidate the undeniable efficacy of plant-based nutrition, traditional interventional cardiology faces an existential threat: adapt and evolve or risk obsolescence. AI can analyse extensive medical datasets rapidly, identify intricate nutritional and physiological patterns, and objectively validate lifestyle interventions through unbiased, data-driven research. AI can further personalize dietary interventions and enhance patient compliance through predictive analytics by identifying individualized motivational triggers, barriers, and optimal nutritional strategies. Additionally, AI-driven platforms can democratize access to expert nutritional guidance, empowering patients and clinicians with real-time insights into dietary impacts on cardiovascular health, thus bridging the gap between preventive and interventional cardiology [27–29]. The profound successes achieved at Bethsaida Hospital underscore the power of diet as medicine and highlight a pressing ethical and economic imperative for systemic transformation. The future of cardiology demands a revaluation of professional priorities, placing compassionate, preventive care above procedural profit. Thus, the PBD revolution emerges not as an enemy but as a catalyst to reclaim the heart of medicine.

Conclusion

The resistance of interventional cardiologists to embrace a plant-based dietary approach reflects a deeper tension between evidence-based prevention and a healthcare model incentivized by procedures. Despite decades of data demonstrating the effectiveness of PBD in reversing CAD, the profession remains dominated by high-cost interventions. However, our experience at Bethsaida Hospital shows that it is possible to harmoniously integrate advanced interventional techniques with PBD and AI, without sacrificing clinical success or professional standing. Our outcomes, including dramatic reductions in restenosis, medication use, and disease burden, underscore the power of food as medicine. As AI continues to expose the inefficiencies of current paradigms and patients demand safer, sustainable solutions, the question is no longer whether lifestyle medicine works—it does—but whether the medical establishment is willing to adapt. The path forward is clear: a future where procedures are no longer the first line of defence, but the last resort, and where nutrition and compassion reclaim their rightful place in the heart of medicine.

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