



Prostate
Cancer
Foundation

5. Basic and Clinical Investigation of Prostate Cancer Patient Metabolism, Quality of Life, Nutrition, and Survivorship

Statement of Problem

Epidemiological evidence supports the notion that nutrition, metabolism, and lifestyle may impact the progression and of prostate cancer. This is supported by more recent observations that fat-derived metabolic products and dietary components might exert a pro-inflammatory result. This could both cause prostate cancer and accelerate the progression of established prostate cancer. Hormonal manipulations to treat prostate cancer have created bone mineral density reduction, reduction in lean muscle mass and subsequent accumulation of fat, changes in cognitive behavior, and a possible increased risk for major cardiovascular events.

These issues all affect the survivorship for advanced prostate cancer patients.

Studies of medications in certain aspects of survivorship, e.g., use of bisphosphonates to reduce risk of skeletal-related events in patients undergoing androgen deprivation therapy, have been very productive. More study is needed in this area. Diet composition to reduce the risk of prostate cancer and slow progression of the disease in newly diagnosed individuals needs further exploration.

Proposed Solution

PCF seeks proposals to define the metabolic components of diet and lifestyle that impact the progression of prostate cancer. Insight from pathologists, geneticists, and endocrinologists will be required. Investigations have attempted to be global in defining determinants. Definitive and narrowly defined results that translate into public health recommendations would be more effective.

Overall health and wellness during long-term survivorship of prostate cancer, especially when chronic hormonal manipulations are used, requires study. We need to assess cardiovascular risk in patients undergoing chronic androgen deprivation. Epidemiological data in this population and medicine combinations with androgen-ablative agents, have established better risk profiles. Laboratory studies are needed to define health risks associated with survivorship.