

Second Edition

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NUTS AND SEEDS

in Health and
Disease Prevention



ACADEMIC
PRESS

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Tamarind (*Tamarindus indica*) Seeds in Health and Nutrition

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List of Abbreviations

DPPH 2,2-Diphenyl-1-picrylhydrazyl
NO Nitrous oxide
PG Prostaglandin
WHO World Health Organization

Introduction

The integral role of seeds in preagricultural diets is understandable given their high energy and nutrient density.¹ Seeds are also particularly important in human nutrition because of their unique composition in bioactive compounds.² Of note, in the last decade, a large body of scientific evidence has been built on the beneficial effects of increasing consumption of plant seeds³ and derived products on various health outcomes.⁴ Tamarind (*Tamarindus indica* L.) is a member of the dicotyledonous family Fabaceae (Leguminosae). It grows in more than 50 countries of the world. The major areas of production are in Asian countries such as India, Bangladesh, Sri Lanka, Thailand, and Indonesia and in the African and the American continents. The tamarind tree is a long-lived, large evergreen, or semi-green tree and grows wild, although cultivated to a limited extent. Tamarind is a multipurpose tree species; almost every part of it finds some use.⁵ The fruit contains about 55% pulp, 34% seed, and 11% shell and the fiber in a pod. The fruit is pendulous, and the pods are oblong or sausage shaped, curved or straight, with rounded ends. Pods contain 1–10 seeds, irregularly shaped, flattened, rhomboid, with the center of each flat side of the seed marked with a large center