

AN APPROACH TOWARDS POTATO UTILIZATION
FOR THIRD WORLD COUNTRIES

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ABSTRACT

Almost all food systems and manufacturing processes of today cater exclusively for the middle high income consumers. Sophisticated processes and techniques exploit the consumer's requirements and can offer a wide choice of products to satisfy even the most demanding marketing criteria. In contrast, little or nothing by way of a parallel is directed towards the abundant low income consumers in third-world countries. This consumer type is financially unable to benefit from the wide array of food products available in the market and because of seasonality and high perishability nutritious fruit, vegetable and root crops are excluded from their diets during certain periods of the year. Attempts to apply existing food science and processing technologies for the benefit of such consumers has commonly been approached from either a technological or nutritional stand-point and have not met with much success. This paper explains a consumer-orientated approach to the development of potato based food products at the International Potato Center. It not only illustrates how conventional food industry approaches, using consumer information (food habits and taste preferences, food prices, costs and availability of raw materials, nutritional factors and processing technologies), are being used to develop potato based products acceptable to Peruvian consumers but also attempts to illustrate the relevance of the approach to root crop processing in third-world countries.

RESUME

Presque tous les systèmes alimentaires et procédés de fabrication actuels s'adressent exclusivement aux consommateurs ayant des revenus moyens ou élevés. Des procédés et techniques sophistiqués tirent parti des demandes du consommateur et peuvent offrir un large

choix de produits pour satisfaire les critères de demande commerciale même les plus exigeants.

Au contraire, peu ou rien ne s'adresse à la masse des consommateurs à faible revenu des pays du Tiers Monde. Ce type de consommateur est financièrement incapable de bénéficier du large éventail de produits alimentaires disponibles sur le marché. A cause de leur saisonnalité, de leur faible durée de conservation, des fruits, des légumes, des racines sont exclus de leur alimentation pendant certaines périodes de l'année. Des tentatives pour appliquer la science des aliments et les procédés technologiques actuels au bénéfice de tels consommateurs sont communément envisagées d'un point de vue soit technologique soit nutritionnel et n'ont pas eu beaucoup de succès.

Cette communication explique une approche orientée vers le consommateur pour le développement de produits alimentaires à base de pomme de terre au Centre International de la Pomme de terre (IPC). Elle montre non seulement comment les approches de l'industrie alimentaire conventionnelle utilisant l'information sur le consommateur (habitudes alimentaires, préférences gustatives, prix alimentaires, coûts et disponibilité des matières premières, facteurs nutritionnels, technologies de traitement) sont utilisées pour développer des produits à base de pomme de terre acceptables par les consommateurs péruviens mais aussi des tentatives pour illustrer la pertinence de cet approche pour le traitement des cultures de tubercule dans les pays du Tiers Monde.

INTRODUCTION

An increasing number of potato producing countries throughout the world are showing interest in processing. Frequently, in third-world countries, this interest is based on ill-conceived ideals of helping to smooth-out the gluts and deficiencies, and accompanying high price fluctuations, of prevailing supply patterns. Similarly, this interest is commonly manifested in desires to copy products and processes presently being used in industrialised nations. Such thinking, which fails to consider food processing as part of an overall food plan of the country or region concerned, rarely leads to the establishment of successful research and development projects and even less frequently to the establishment of new food products and industries.

However, in defense of this unfortunate but prevailing approach, it must be mentioned that : a) almost all food manufacturing processes of today cater exclusively for the middle/high income consumers, who constitute a minority of the population in many developing countries, and b) most of the training which has been provided in food processing has been based in the industrialised nations with focus on individual components e.g. nutrition, new products, processing or marketing of the food system with relatively little attention being placed on the underlying principles of these components and their application to an integration into a total food program.