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BeKi – an initiative for nutrition education in children in the federal state of Baden-Württemberg: description, experiences, and considerations for an evaluation framework

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Summary

Objectives: To present the State Initiative BeKi (from **B**ewusste **K**inderernährung, conscious child nutrition; formerly: “program Nutrition Education with Children”), carried out state-wide by the Baden-Württemberg Ministry for Nutrition/Food and Rural Area since 1980. The mission of BeKi is the improvement of nutritional knowledge, nutritional behaviour, and nutrition situation of children.

Methods: The program description considers the most important evaluation criteria for health promotion programs, including practical experience and an evaluation concept. Currently comprehensive evaluation is carried out according to the RE-AIM Model for health promotion programs which assesses the public health impact in regard of individual and institutional reach, efficacy, adoption, implementation, and maintenance.

Results: BeKi addresses all target groups involved in the upbringing and education of children from age six months up to the end of the 6th grade and provides factual, validated, and independent information on child nutrition and nutrition education. Physiological, educational, and social aspects of food and nutrition are given equal importance. Core component of BeKi are the services of more than 250 BeKi-trained child nutrition experts.

Conclusion: Previous experience and first evaluation results confirm that BeKi is creative, committed, cost-efficient and widely-used.

Keywords: Health promotion – Nutrition education – Children – Evaluation.

For the growth and development of children nutrition adequate to their dietary needs is of vital importance. In addition, adequate nutrition contributes to the protection of health and prevents dietary deficiencies and numerous diseases. Furthermore, nutritional behaviour is undisputedly formed during childhood and difficult to modify in later years. Because of these facts nutrition education for children has been given strong attention in the last years.

In this context, nutrition education may be defined very comprehensively as any learning experience contributing to the voluntary adoption of nutritional behaviour conducive to health (Contento et al. 1995).

With the State Initiative BeKi (**B**ewusste **K**inderernährung, conscious child nutrition; formerly: program “Nutrition Education with Children”) the Baden-Württemberg Ministry for Nutrition/Food and Rural Area (MLR) has been offering a statewide program for nutrition education with children since more than 20 years. Currently, BeKi undergoes an external evaluation.

This paper describes the State Initiative BeKi, discusses the experience of long-term program implementation from practitioners points of view, and presents considerations for an evaluation framework.

Program description

The program description follows the criteria for a critical program review recommended by the US Department of Health and Human Services in their “Framework for

program evaluation in public health” (CDC 1999): need, stage of development, expected effects, activities, resources and context. Technically this critical description provides the first evaluation step and a common basis for all parties involved in the program evaluation.

Need

The initial impulse for the development of a primary prevention program for nutritional education with children through the MLR came from the German Nutrition Report of 1976 (DGE 1976). It pointed to the deficiencies of the nutrition situation of children and emphasized the importance of nutrition education.

In 2002, the Baden-Württemberg Report on Child Nutrition (Baden-Württemberg Ministry of Social Affairs (SM) & MLR 2002) – updated by current research – pinpoints the prevailing problem areas and confirms the persistent need for the nutrition education program BeKi for children:

- The rate of overweight children is alarmingly high (SM & MLR 2002; Wabitsch 2002).
- The rate of obese children is increasing, children from disadvantaged social environments and children with a migrational background are affected disproportionately (SM & MLR 2002; Czerwinski-Masu et al. 2003; Erb & Winkler 2004).
- Children with normal weight are increasingly dissatisfied with their appearance and try to reduce weight (Westenhofer 2001).
- As to food intake, the intake of beverages, vegetable foods in general (most notably vegetable dishes, bread and side dishes rich in carbohydrates) and wholemeal products in particular is insufficient. The intake of fat-rich animal foods (full-fat milk and milk products, fat meat and sausages) and most notably of confectionery and baked goods is too high (SM & MLR 2002; Merx et al. 2003).
- The nutrient intake reflects the deficits of the adult population: high fat intake with unfavourable fat composition, inadequate carbohydrate intake containing too much sucrose and not enough dietary fibre, and a deficient intake of calcium, iodine, and folic acid (SM & MLR 2002; Merx et al. 2003).
- Meals in the familial environment seem to become less important (e.g. having lunch together), mass catering does not offer alternatives to replace these meals (SM & MLR 2002; Brombach 2003).
- Food preparation at home is declining for various reasons and home-cooked meals are increasingly infrequent (SM & MLR 2002; Brombach 2003; Wiener & Winkler 2003).

Stage of development

BeKi has been active in this field for 25 years. To our knowledge it represents the nutrition education program for children in the German language area with the longest uninterrupted operation span. The target groups were repeatedly extended, new program components incorporated and structural changes and program enhancements (see Tab. 1) put into effect so that BeKi can be considered as very mature in function and content. The most recent modification was the renaming of the program “Nutrition Education for Children” in “State Initiative BeKi– Conscious Child Nutrition” with the motto “Eating fit tastes delicious” (“Fit Essen schmeckt”). The new name emphasizes the fact that child nutrition should be shaped in a conscious way (health-oriented, supportive of self-reliance, positively connoted) (see Fig. 1).

Expected effects

The mission of BeKi is the improvement of nutrition knowledge, nutritional behaviour and the nutritional situation of children in Baden-Württemberg. It is intended

- to show parents, school teachers, and kindergarten and nursery teachers the importance of nutrition and nutrition education for the well-being, development and health of children;
- to inform parents and teachers how children can be nourished well and adequately to their needs;
- to advise parents and teachers how nutrition education can be put into practice in families and educational institutions.

The precise objectives are as follows:

- Education for autonomy: children should assume joint responsibility for their nutrition early on. They should be allowed to share decisions about food and nutrition and thus be sensitised for healthful nutrition.
- Accustomisation of children to nutrient-rich foods: the provided food should correspond to the children’s needs.



Figure 1 New logo of the State Initiative BeKi – Conscious Child Nutrition

A regular intake of food with high nutrient density is to be striven for.

- Promotion of health-conscious nutritional behaviour: parents and teachers should become aware of their function as role model and confirm children in eating habits adequate to their needs.

For the realisation of these objectives BeKi addresses all target groups involved in the education of children from age six months through grade 6 in school, namely parents and other caregivers, teachers in day care facilities for children, school teachers up to grade 6, home economists and kitchen staff at day care facilities and schools.

Activities

BeKi provides factual, validated, and independent information on child nutrition and nutrition education to all parents and teachers statewide by three measures: print media, advanced trainings for teachers and staff, and qualified multipliers. Physiological, educational, and social aspects of food and nutrition are considered to be of equal importance.

Print media

These are mainly compilations of informative literature which is provided for free to teachers in day care facilities and schools statewide. These compilations contain a wide variety of materials (songs, games, puzzles, recipes and more) from which teachers can compose specific programs for the various age groups (see Fig. 2).

Furthermore there are informational flyers and booklets about nutrition education and child nutrition at various age groups (infants, kindergarten, school up to grade 6) available free of charge for any interested parties.

Advanced training for kindergarten and school teachers and housekeeping and food service staff

Furthermore, BeKi offers in-house advanced training in the subject areas of nutrition and nutrition education for teachers and staff of schools and day care facilities. Possible subjects are nutrition education, adequate nutrition for children, menu planning, food hygiene, or other topics as requested by the training participants.

Qualified multipliers: experts for child nutrition

Core component and noteworthy achievement of BeKi are the currently more than 250 female freelance experts for child nutrition (see Fig. 3) who, as qualified multipliers, offer target group specific events on child nutrition covering the whole of Baden-Württemberg.

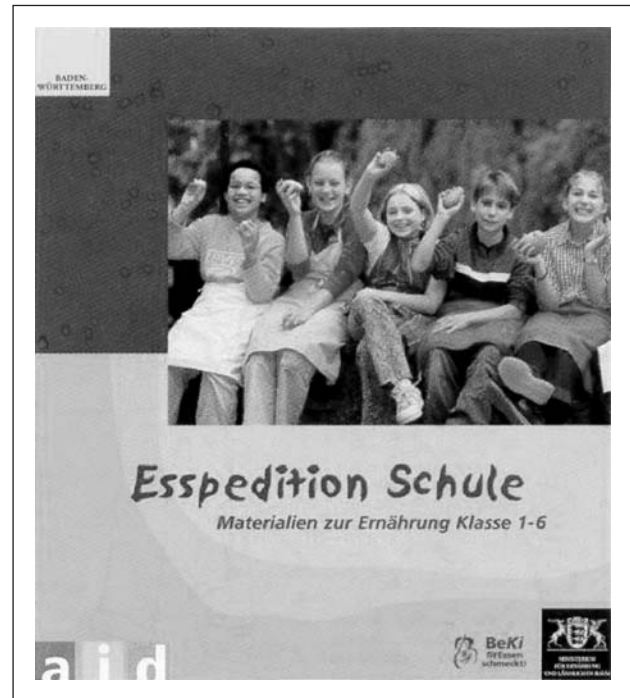


Figure 2 The ring binder “Esspedition Schule. Materialien zur Ernährung Klasse 1–6” – “Eatpedition (from expedition) School. Materials for Nutrition Education grade 1–6”(State Initiative BeKi, Baden-Württemberg)

These are the subject areas they are able to provide:

- Infants: parent meetings in relevant institutions, e.g. adult evening schools, church-sponsored educational institutions, or toddlers groups. Exemplary topics for these events are the introduction of complementary solid foods for babies or information about food allergies.
- Kindergarten: parent meetings in kindergartens and other pre-school day care facilities. Exemplary events are evening classes for parents on adequate child nutrition, parent/child afternoon classes on healthy school snacks for pre-school children, or the endorsement of the “National Dental Health Day”.
- Primary schools (grades 1–4) and secondary schools (grades 5–6): parent meetings, lessons in collaboration with the responsible class teachers, extra-curricular educational activities at school. Exemplary events are action days for healthy school snacks, farm visits for students, and projects like “From Grain to Bread” and “Milk”.

The number of assignments of the child nutrition experts has been increasing ever since BeKi’s official inception in 1980. During the school year 2002/2003 the experts carried out 4747 assignments, predominantly in primary schools which accounted for 64% of the assignments. Actions, exhibitions, project days and the like are gaining importance. The child

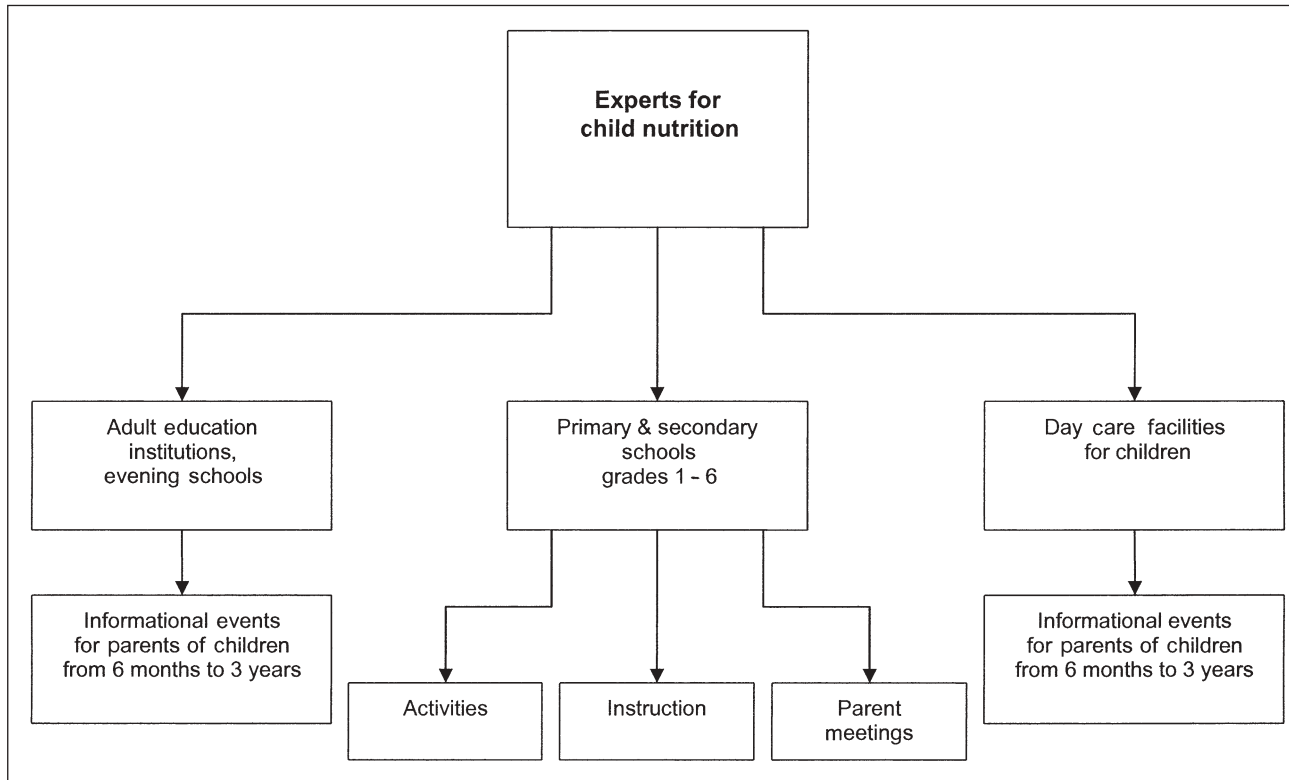


Figure 3 Model of the experts for child nutrition in the State Initiative BeKi, Baden-Württemberg

nutrition experts support the work of the regional units for Agriculture, Landscape and Soil Cultivation of the district offices (Landratsämter, LRA) and other agencies (e.g. community colleges, health insurances and sickness funds, regional farm women's organisations). Examples for this collaboration are barnyard festivities, open days, health days, or first-day-of-school activities. They are present at the state horticultural shows, commercial fairs, and they support the German "5 a-day campaign".

Experts for child nutrition must have professional training in the occupational fields of nutrition, home economics, pedagogics, and/or health services to meet the admission requirements. The first step of the additional qualification is an introductory course provided by the MRL which ends with a mandatory practical project and qualifies for nutrition education in kindergartens.

For further training a comprehensive program is offered. In courses taking several days the experts can acquire the qualification for other fields of work (see Fig. 4). Currently 67% of the active experts have the additional qualification for primary schools, 53% for infants, and 36% for secondary schools.

Results of a current survey in the child nutrition experts suggest a high degree of self-identification with the program. As

main reasons why they took up this occupation the experts stated the compatibility of family and work, interest in healthy nutrition, the opportunity of advanced professional training and to start professional work, and the gratification of working with children. Also, self-responsible and diversified work is highly important to the experts. Generally, the work itself, the range of advanced trainings and informative media, and the support through the MLR receive a high rating by the experts.

Regional supervision, co-ordination and quality management of the experts are organised decentrally by the regional LRA in Baden-Württemberg. The experts receive scaled remuneration depending on the kind of assignment, reimbursement of expenses for materials and travels, and free advanced training courses twice a year.

Resources and context

Within the MLR, BeKi is integrated into Division 3 Consumer Protection and Food/ Nutrition, Unit for Consumer Policy and Nutritional Affairs. The organisational grid of BeKi is shown in Figure 5. All activities are funded by the State of Baden-Württemberg, the total per annum amounting to EUR 500 000. Three permanent employees are partly responsible for the central program organisation of BeKi.

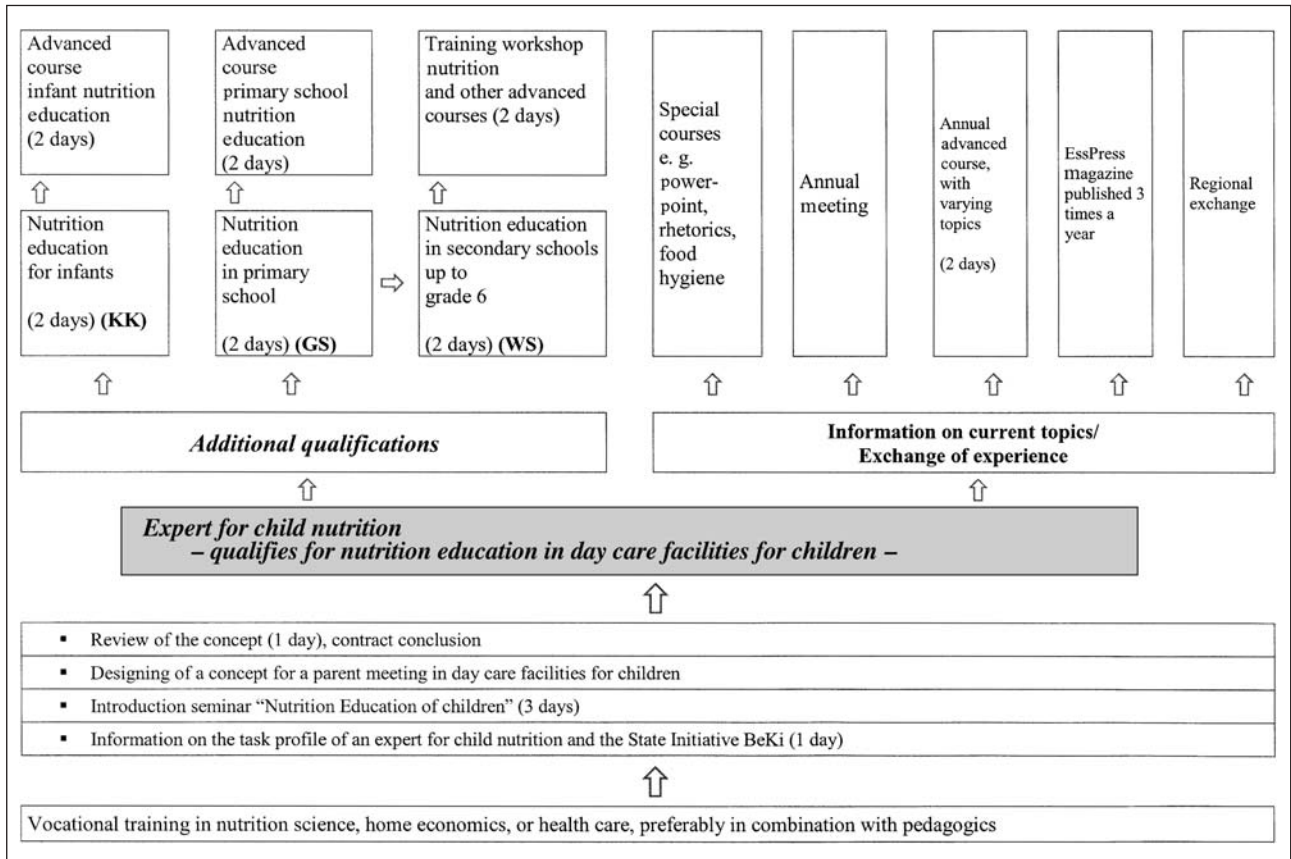


Figure 4 Layout of the provided training units for the child Nutrition (State Initiative BeKi, Baden-Württemberg)

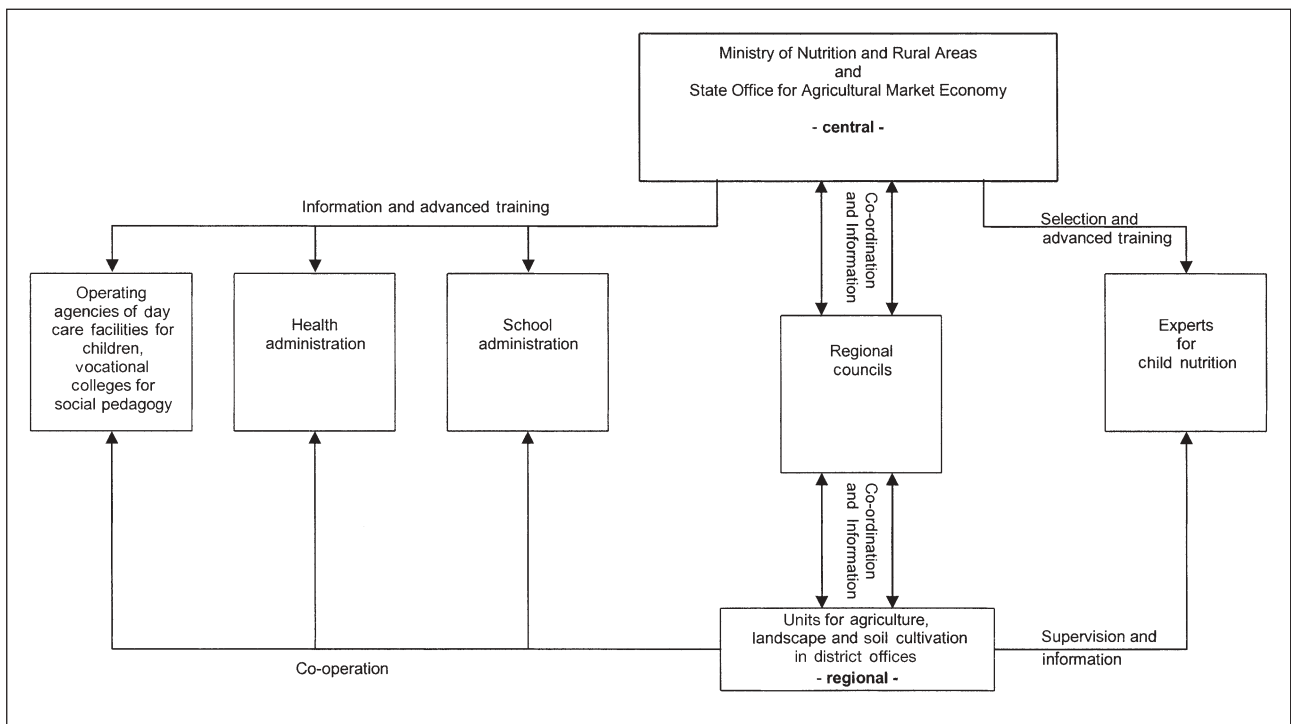


Figure 5 Organizational grid of the State Initiative BeKi, Baden-Württemberg

A close co-operation is maintained centrally with the health offices, school administrations and operating agencies of day care facilities for children. Information about current developments in BeKi is provided to these bodies on a regular basis by the MLR. Numerous decentralised collaborations exist through the regional LRA, which represent BeKi in regional bodies as the Health Education or Juvenile Dental Health Task Forces. In addition to official cooperation, personal contact with the child nutrition experts is another essential in helping BeKi take root and interlace at regional level.

Experiences with the State Initiative BeKi

The following description of 25 years of experience with the State Initiative BeKi refers exclusively to the activities of the child nutrition experts since these represent a unique feature of BeKi.

All experts begin their freelance occupation working with parents in day care facilities for children. A long-term commitment with BeKi is desirable for the experts because, among other reasons, if they acquire the optional extra qualifications they can organise their focus of work not only according to local request but also to their personal disposition and family needs.

Before each assignment, a preceding personal meeting of the expert with a responsible person of the cooperating agencies (pre-school and school teachers, representatives of adult education) is required in general. This is a well-established strategy because it allows adapting further actions to the needs, structure, and everyday work of the respective partner organisation and it increases the self motivation of the partners.

In the field of infant nutrition, the experts work with toddlers groups, educational institutions for families, and adult education centres. Small groups of participants allow the open exchange of experience between the participants along their needs. Focal points here are usually the switch to complementary solid foods for babies and first steps of nutrition education with toddlers. For more extensive individual counselling the parents are referred to a pertinent counselling service.

In kindergarten, the child nutrition experts organise parent meetings but do not usually work with children. Requests and wishes of parents and teachers currently concentrate around these topics: healthy snacks, the usefulness (or lack thereof) of special (commercial) foods for children, nutrition education.

It is a major concern of BeKi that parents understand the guidelines provided by the kindergarten teachers. As far as possible parents and teachers should join in a shared effort

to develop, lay down, and apply rules about what to eat and why, thus ensuring that home and day care facility are working hand in hand.

The kindergarten teachers usually accompany the parent meetings by preparatory work and follow up activities with children (e.g. preparation of snacks for the parents, preparation of items for display). They also take an active part in the parent meetings by presenting previous nutrition-related work with children, the course of meal-related activities and the eating rules in kindergarten. Ample room is provided for the parents to share their experience and discuss aspects of healthy nutrition and nutrition education for their children. At the same time they receive practical support, e.g. suggestions for snacks and beverages, for quick and varied meals, or how to establish table rules.

In the school area the child nutrition experts offer support in theory and practice to teachers for class, special actions, and work with parents. As with kindergartens and day care facilities, an extensive preparatory meeting with the responsible teachers proved of value for the fine-tuning of the program according to the school and life situation of the students. With regard to teaching methods, perception training and food preparation are taking precedence over mere conveyance of theoretical knowledge because children need to develop practical skills in the handling of food, eating environments, and food culture.

The participation of an expert for child nutrition in regular classes and other school activities (e.g. project days, field trips, company visits, activities at school enrolment, parent meetings) is a special learning experience for students and parents and thus reinforces the learning process.

From experience, special actions in general and non-school exhibitions, fairs, or information booths on specific topics (e.g. apples, milk, meat, special foods for children, school snacks) in particular are opportunities to address those parents and children who cannot be reached by other modules of BeKi.

Considerations for an evaluation framework

Our own investigations as well as a review of nutrition intervention studies with children and adolescents in Germany by Kersting et al. (1996) show some basic evaluation approaches in the field of nutrition education in the German language area. However, apart from a few exceptions (e.g. Czerwinski-Masu et al. 2003), no comprehensive ongoing and outcome evaluation exists (cf. Merker et al. 2000).

With BeKi, during the beginning years from 1981 through 1987 numerous measures and components were subjected to formative evaluation (five interview surveys/explorative

Table 1 Chronology of the State Initiative BeKi, Baden-Württemberg (formerly: "Program for Nutrition Education in Children")

1977–78	Realisation and evaluation of a pilot project in the district of Goeppingen.
1979	Decision to implement a statewide program through the Ministry of Nutrition, Agriculture, Environment and Forestry. Clearing of organisational structure and subject matters, consultation with the Ministries of Social Affairs and Education and with the operating agencies for kindergartens.
1979–80	Training of the first 80 external specialists (experts for child nutrition) as multipliers in kindergartens on a pay-per-event basis.
May 1980	Official program start
1985	Extension of the nutrition education program from kindergartens to primary schools and infants. Reassignment of the centralized supervision of the child nutrition experts to decentralized supervision through the District Offices for Agriculture.
1992	Extension of the nutrition education program to secondary schools including the 6 th grade.
2000	20 years Program for Nutrition Education for Children
2003	Program renaming to BeKi (B ewusste K inderernährung, conscious child nutrition)

surveys with kindergarten teachers, three analyses of supporting materials, one parent survey), in which different outcome variables were collected by use of various methods. The new edition of the media compilation for schools "Esspedition Schule" was evaluated as well (von Cramm et al. 2003). In addition, from 1992 through 1994 the long-term effect of the campaign "Gesundes Pausenvesper", a BeKi program module on healthful school snacks, was investigated exemplarily in 38 school classes at 10 primary schools in Esslingen (Herrmann & Ehrentreich 1995). It was shown that a large-scale campaign can indeed stimulate the awareness for healthy nutrition and spur the debate on this subject. Teachers and parents reported mostly short-term improvements of the students' school snacks as well as of their attitudes. From 1997 through 2000 the Research Cooperation Public Health Saxony performed a summative corollary evaluation analysing the efficacy of the program "Nutrition Education Saxony" (Merker et al. 2000). Since this program is based on BeKi and thus on the same objectives and methods the results may be applied to BeKi as well. It was shown that the nutrition knowledge of the children and their attitudes towards nutrition experienced a noticeable long-term improvement whereas behaviour modifications were as expected moderate and only short-lived. Currently an external evaluation of BeKi is underway measuring both the state of program implementation and selected results of BeKi. The results should show whether and which modifications of BeKi will be necessary after 25 years of practice. To do justice to the numerous facets of BeKi the evaluation will not focus on restricted biological outcome variables. It rather follows the comprehensive RE-AIM Framework (Glasgow et al. 1999), which intends to measure a broader public health impact and already has been applied successfully in the evaluation of school health promotion programs (Estabrooks et al. 2003). This model analyses the public health impact along the five crucial di-

mensions reach, efficacy, adoption, implementation and maintenance.

The various outcome variables and study designs which are underway to record these dimensions in the BeKi evaluation are summarized in Table 2. For example, 941 out of 7633 kindergartens in Baden-Württemberg were randomly selected for a postal survey in which headmistresses were interviewed about their institutions (e.g. educational philosophy, number of attending children and groups) and their knowledge and use of the BeKi program in general and its program modules in particular (teaching aids ring binder, nutrition experts, info flyers). As the participation in the survey was rather low (21%), currently a short telephone interview is carried out in 10% of the non-participating kindergartens to collect sufficient data on children reached by and kindergartens adopting BeKi respectively.

A first result of the BeKi evaluation is that efforts have to be made to restandardise program implementation and especially the work of the experts. For that reason a task force of program executives, nutrition experts, and evaluators is developing a quality management framework which will, among other things, include a comprehensive manual of standardized operations.

Discussion

As stated in the "Framework for Program Evaluation in Public Health" published by the U.S. Department of Health and Human Services (CDC 1999) the prerequisite for any evaluation is a critical program description.

According to review articles by Lytle and Achterberg (1995), Contento et al. (1995; 2002), and Hoelscher et al. (2002) on evaluation results of nutrition education programs for children and adolescents, complemented by guidelines for (CDC 1996; Dixey et al. 1999) and studies of nutrition education in schools (Westenhofer 2001; Pérez-Rodrigo &

Table 2 Evaluation framework of the State Initiative BeKi, Baden-Württemberg (formerly: "Program for Nutrition Education in Children"): Study design structured by the RE-AIM evaluation dimensions reach, adoption, efficacy, implementation, maintenance^{a)} (according to Glasgow et al. 1999, supplemented)

Outcome measure	Data collection method	Survey participants
RE-AIM evaluation dimension: reach (individual level) = proportion of the target population participating in the intervention program		
Proportion of Baden-Württemberg • preschool children • kindergarten teachers knowing resp. participating in BeKi	Postal written survey in 941 of 7633 kindergartens (1) supplemented by a short telephone interview in 10 % of the non-participating kindergartens (2)	(1): kindergarten headmistresses (2): a available kindergarten teacher in each institution
Proportion of Baden-Württemberg • primary school children • primary school teachers knowing resp. participating in BeKi	Email-based written survey in all 2204 primary schools (3) supplemented by a short written survey in 10 % of the non-participating schools (4)	(3): a responsible teacher per school (4): headmaster/-mistress
RE-AIM evaluation dimension: adoption (organisational level) = proportion of settings, practices, and plans adopted by program participants		
Proportion of Baden-Württemberg • preschools • kindergartens participating in BeKi	Same as to measure reach	Same as to measure reach
RE-AIM evaluation dimension: efficacy (individual level) = success rate		
State of nutritional knowledge and food behaviour • in children • in teachers and state of nutrition policy and dietary environment in kindergartens and primary schools	Comparison of kindergartens and primary schools regularly participating in BeKi and not knowing BeKi • personal interviews (5) • focus group discussions (6)	(5): headmasters/-mistresses (6): teachers
RE-AIM evaluation dimension: implementation (organisational level) = extent to which the intervention is implemented as intended		
Adherence to standards taught in the the introductory course and in the training courses	Postal written survey (7) Focus group discussions (8)	(7): all experts for child nutrition (8): selected new experts for child nutrition
RE-AIM evaluation dimension: maintenance (individual and organisational level) = extent to which a program is sustained over time		
Number of different assignments in various regions in Baden-Württemberg over time	Regular system monitoring of the various kinds of assignments and remuneration, implemented by the MLR since program start	Data delivered by the LRAs on a yearly basis

a) The product of the 5 dimensions is the public health impact score (population-based effect)

Aranceta 2001), successful nutrition education programs have the following characteristics (Winkler et al. 2004):

- They are based on an accepted theoretical framework model for behaviour change.
- They are strongly related to behaviour and only weakly to knowledge.
- They pursue clearly defined, achievable and quantifiable objectives.
- Content and methods are adjusted to the physical and cognitive development level of the respective age groups.
- They consider social and cultural backgrounds.
- Their approach is holistic and addresses not only nutritional behaviour but other health-relevant behaviours (most notably physical activity).
- In addition, they emphatically address living conditions/social environments.
- They are geared towards long-term duration, intensive approach and a broad reach.
- They are networking with as many actors from the nutrition and health sectors as possible.

- They are subject to evaluation and implement the results within a short time.

If the detailed and objectified program description of BeKi is compared with these critical success factors, the following facts can be presented as first qualitative results of the external evaluation: The program contents of BeKi are of topical relevance to the present situation. BeKi is strongly behaviour-oriented. Contents and methods of the provided materials correspond to the development level of the target groups. The program explicitly emphasises social and cultural backgrounds and at least basically addresses other health-related behaviours. Furthermore, BeKi is a long-term program with a vast reach. Because of the statewide presence of the experts for child nutrition BeKi keeps a high profile and is networking with other actors in the field of health education.

Room for improvement exists in regard of clearly defined and achievable objectives in combination with a permanent straightforward evaluation system. Where appropriate, it should be part of a quality management system (BZgA

1999). A more pronounced orientation of the prevention program towards the social environment would be helpful. Finally, further consideration should be given to an even more elaborate networking which makes exhaustive use of the diversity of potential actors from local clubs to food industry and retail.

As to the ongoing program evaluation, no biological markers are considered due to feasibility reasons and because in our view biological markers don't do justice to the variety of facets and possible outcome variables of BeKi. This is in line with the general agreement that besides physical parameters and behaviour modification factors influencing behaviour (e.g. cognitive performance, self-efficacy, behavioural intentions, social environment) are valid success indicators (Contento et al. 1995; Lytle & Fulkerson 2002).

Zusammenfassung

Landesinitiative BeKi zur Ernährungserziehung von Kindern in Baden-Württemberg: Programmbeschreibung, Erfahrungen und Überlegungen zu einem Evaluationskonzept

Fragestellung: Beschreibung der Landesinitiative BeKi (Bewusste Kinderernährung; früher: Programm „Ernährungserziehung bei Kindern“), die das Ministerium Ernährung und Ländlicher Raum Baden-Württemberg seit 1980 landesweit durchführt, unter Berücksichtigung der wichtigsten Beurteilungskriterien für Gesundheitsförderungsprogramme, ergänzt um praktische Erfahrungen und ein Evaluationskonzept.

Methoden: Die Leitlinie von BeKi ist die Verbesserung des Ernährungswissens, des -verhaltens und der -situation von Kindern.

Ergebnisse: Zielgruppe sind diejenigen, die an der Erziehung von Kindern ab dem 6. Lebensmonat bis zum Ende des 6. Schuljahres beteiligt sind. Es werden sachlich richtige, fachlich abgesicherte und wirtschaftlich unabhängige Informationen zu Fragen der Kinderernährung und Ernährungserziehung bereitgestellt, die ernährungsphysiologische, erzieherische und soziale Aspekte der Ernährung gleichbedeutend behandeln. Die zentrale Komponente sind die Leistungen von über 250 BeKi-geschulten Fachfrauen für Kinderernährung. Derzeit wird eine umfassende Evaluation nach dem RE-AIM Modell für Programme zur Gesundheitsförderung durchgeführt, bei dem der Public-Health-Impact über die fünf Dimensionen Reichweite auf individueller und institutioneller Ebene, Effizienz, Durchführung und Programmdauer beurteilt wird.

Schlussfolgerung: Die bisherigen Erfahrungen und die ersten Evaluationsergebnisse zeigen, dass BeKi kreativ, engagiert und kostengünstig arbeitet und weit verbreitet ist.

Conclusion

BeKi can be considered as a typical example of how results of health monitoring become the starting point for interventions for specific target groups. During the program monitoring results are drawn on as a tool for ongoing evaluation and program modification. Summing up, BeKi meets the main requirements of effective nutrition education programs for children which above all need to be “creative, engaging, inexpensive and widely disseminated” (Pérez-Rodrigo & Aranceta 2001: 132). The results of the current external evaluation will provide generally valid references for planning, implementation, and evaluation of programs for nutrition education with children.

Résumé

Education nutritionnelle des enfants – Initiative „Bewusste Kinderernährung“ (BeKi) du Land Baden-Württemberg: description du programme, expériences et réflexions autour d'un concept d'évaluation

Objectifs: Présenter l'initiative en faveur de l'éducation alimentaire des enfants „Bewusste Kinderernährung“ (BeKi – „Pour une alimentation des enfants en connaissance de cause“). BeKi est menée depuis 1980 par le ministère de l'alimentation dans le land du Baden-Württemberg. Elle vise l'amélioration des connaissances, des comportements alimentaires et du statut nutritionnel des enfants.

Méthodes: La description du programme utilise les principaux critères d'évaluation des programmes de promotion de la santé: aspects pratiques et concept d'évaluation. Actuellement, une évaluation globale est menée selon le modèle RE-AIM de promotion de la santé, qui évalue les impacts en termes de santé publique selon les indicateurs suivants: atteinte des individus et des organisations, efficacité, adoption, mise en œuvre et maintenance.

Résultats: BeKi s'adresse à tous les groupes-cibles impliqués dans l'éducation des enfants dès 6 mois et jusqu'à la 6^e année scolaire. Cette initiative fournit des informations factuelles, validées et indépendantes sur la nutrition des enfants et l'éducation nutritionnelle. Les aspects physiologiques, éducationnels et sociaux de l'alimentation sont d'égale importance. BeKi repose principalement sur le travail de 250 experts en nutrition des enfants.

Conclusion: Les expériences faites jusqu'à présent et les premiers résultats de l'évaluation montrent que BeKi travaille de manière créative et efficace et que cette initiative est largement diffusée.

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