

EUROPEAN COMMISSION

E+ Capacity Building in Higher Education

SEA-ABT: SOUTH EAST ASIA ACADEMY FOR BEVERAGE TECHNOLOGY

Project number: 561515-EPP-1-2015-1-AT-EPPKA2-CBHE-JP

October 2015-September 2018

Deliverable D4.2

Digital Library

Prepared by: Foteini Chrysanthopoulou (IFA)

Contributors: Line Lindner (BOKU)

Delivery date: M41 – March 2019

Dissemination Level					
PU	Public	Х			
PP	Restricted to other programme participants (including Commission services and projects reviewers)				
СО	Confidential, only for members of the consortium (including EACEA and				
	Commission services and projects reviewers)				



Summary:

This deliverable presents the contents of the online database — Digital Library — which contains training materials in the food sector. The online database was developed under the FooD-STA project (ERASMUS+ Knowledge Alliance, 554312-EPP-1-2014-1-AT-EPPKA2-KA) and was fed with training materials developed under the same project, as well as with existing resources from the ISEKI-Food network and TRAFOON databases.

Training materials developed under the SEA-ABT project were added and SEA-ABT consortium members were invited to contribute and include other available materials related to the food sector and the project itself. The online database enables users to filter for materials directly related to the SEA-ABT project and do a parameterised search according to their needs.



Contents

1	Introduction	4
2	Database structure	5
3	Training Materials submitted by the SEA-ABT Consortium	8
4	Facts & Figures about the Training Material	12

The European Commission support for the production of this publication does not constitute endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Project Coordinator:

GERHARD SCHLEINING | BOKU – Universitaet fuer Bodenkultur Wien | gerhard.schleining@boku.ac.at



1 Introduction

The **Digital Library** was initially developed under the <u>FooD-STA project</u> (ERASMUS+ Knowledge Alliance project (554312-EPP-1-2014-1-AT-EPPKA2-KA) and currently contains a broad collection of online educational and training materials in various formats and languages for professionals, academics and students from the field of food and drink sector internationally. Moreover, the training materials are classified into several sectors and categories.

At the beginning, the Digital Library was fed with selected existing resources from the past <u>ISEKI Food network</u> and <u>TRAFOON</u> databases and was then sustained with the outcomes of the FooD-STA project. New contributions were requested from the SEA-ABT Consortium to increase the offer of different and multidisciplinary resources available in this database.

The Digital Library can be retrieved from the SEA-ABT website (https://www.sea-abt.eu/tools) as shown on Figure 1 or from the ISEKI-Food Association free databases website (https://db.iseki-food.net/) as shown on Figure 2.

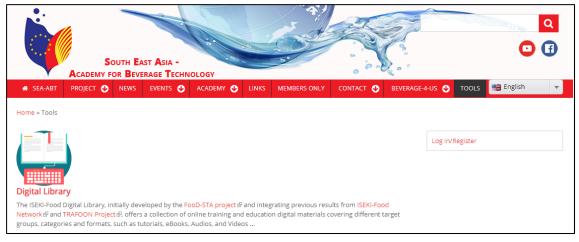


Figure 1: Digital Library link from the "Tools" menu on the SEA-ABT website.



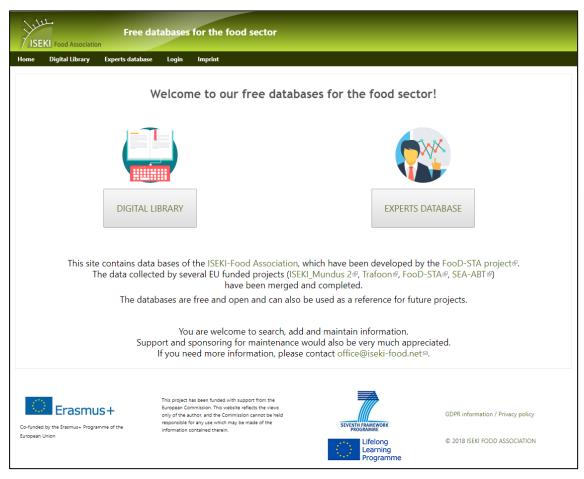


Figure 2: Digital Library link on the Free databases website of the ISEKI-Food Association.

2 Database structure

The structure of the Digital Library was designed under the FooD-STA project and can be outlined in Table 1. Particularly, each entry of a training material in the library includes the following elements:

- Title in English
- Title in the original language
- Sector(s) (Fish, Fruits & vegetables, Grains, Meat, Poultry & eggs, Oil & fat, Dairy, Confectionary, Beverages, Education & training, By-products and waste, Other)
- Category(-ies) (Quality & safety, Entrepreneurship, Primary production, Processing, Hygienic design, Labelling, Marketing, Packaging, Product development, Soft skills, Food engineering, Food analysis, Food Chemistry, Food microbiology, Nutrition, Biotechnology, Statistics, Food law, Miscellaneous)
- Description
- Target group(s) (Students, Trainers & teachers, Professionals)



- Training format(s) (PDF documents, eBooks, audios, videos, webpages, flash animations, simulations, online courses, webinars and demonstrations)
- Language
- Link URL

Users who access the Digital Library can search for training materials by choosing various filters (parameterised search), as seen in Figure 3.

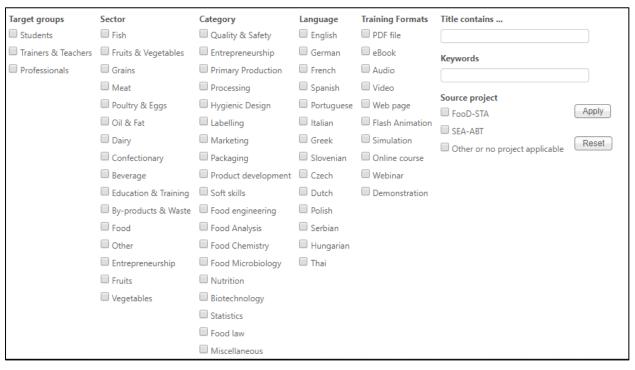


Figure 3: Parameterised search fields in Digital Library.

Materials can be added by anyone by clicking the link on https://db.iseki-food.net/digital-library/output. Before being shown in the Digital Library, each entry is checked by staff at the ISEKI Food-Association.

Ongoing dissemination of the Digital Library is done through the SEA-ABT website and its social media channels as well as through the dissemination channels of the ISEKI Food-Association.



Table 1: The structure of the Digital Library.

Title in English	Title in original language	Sector	Category	Description	Target groups	Training formats	Language	Link - URL
Free text	Free text	Multiple check box	Multiple check box	Free text	Multiple check box	Multiple check box	Drop down menu	Free text
		Fish	Quality & safety		Students	PDF		
		Fruits & vegetables	Entrepreneurship		Trainers & teachers	e-book		
		Grains	Primary production		Professionals	Audio		
		Meat	Processing			Video		
		Poultry & eggs	Hygienic design			Webpage		
		Oil & fat	Labelling			Flash animation		
		Dairy	Marketing			Simulation		
		Confectionary	Packaging			Online course		
		Beverages	Product development			Webinar		
		Education & training	Soft skills			Demonstration		
		By-products and waste	Food engineering					
		Other	Food analysis					
			Food Chemistry					
			Food microbiology					
			Nutrition					
			Biotechnology					
			Statistics					
			Food law					
			Miscellaneous					



3 Training Materials submitted by the SEA-ABT Consortium

Throughout the Project, 110 contributions of online Training Material were uploaded by the SEA-ABT Consortium on the Digital Library. Various topics related to the food sector were covered, such as beverage production, fruit juice production and hygienic criteria.

An alphabetical list of all these Training Materials is shown on Table 2.

Table 2: List of online Training Materials on the Digital Library.

Table 2: List of online Training Materials on the Digital Library.				
Title of training material				
3D animation of 2-phase decanter centrifuge with CIP				
3D animation: VODKA production				
3D animation: Whisky production				
3D Milk plant animation - Dairy Milk Processing Manufacture				
Agitators				
Amazing food processing line				
Analysis of juices and carbonated beverage with density and refractive index measurement				
Animation falling film evaporator				
Application of Metabolomics Technology for Investigation of Biomolecular Profile of Milk and Dairy Products				
Application of Metabolomics Technology for Investigation of Biomolecular Profile of Milk and Dairy Products				
Aseptic processing				
Aseptic Solutions USA, A Beverage Manufacturing Plant				
Automation! Packaging beer bottles				
Barley to Beer				
Beer production				
Beer production overview				
Beverage can production process				
Beverage Packaging Innovation Review				
Blending in a Stirred Tank - Basic Design Principles				
Bottle liquid filling & capping machine				



Brewing Technology

Brewery Sanitation and treatment with Ozone



Canned Coffee Production Line

Capacitance level instruments

Centrifugation explanation

Cold Storage in the Food and Beverage Industry

Dairy Product Manufacturing Mini plant with blender and reception unit

Dissolved oxygen measurement

Distilled beverages

Eco-friendly beverage drink packaging

FDA GMP Training

Final Product Quality Control in the Brewery

Food & Beverage operations Management 2

Food & Beverage operations Management 3

Food & Beverage operations Management 4

Food Safety Hazards: Microbial, chemical and Physical

Fruit juice production

Glass bottle beer filling machine

Guidance for Industry: Juice HACCP and the FDA Food Safety Modernization Act

HACCP-Making food products safe, Part 1

HACCP-Making food products safe, Part 2

Hazardous Waste Management for Food & Beverage Processing Facilities

Hot topics in food and beverage law

How do common valves work?

How is Beer Made? Process of Beer Making

How It's Made? Apple juice | Episode 1. Acceptance of raw material - wet and dry unloading systems

How It's Made? Apple juice | Episode 2. Fruit pulp preparation and processing

How It's Made? Apple juice | Episode 3. Juice yielding on an IPS 10,000 press

How It's Made? Apple juice | Episode 4. pasteurisation and de-aromatisation of unclarified juice.

How It's Made? Apple juice | Episode 5. Ultrafiltration of unclarified juice.

How It's Made? Apple juice | Episode 6. Concentration on evaporation station.

How It's Made? Apple juice | Episode 7. Standardisation and storage

How It's Made? Apple juice | Episode 8. Clean in place station.

How orange juice is made



How to make wine from grapes at home

Hygienic Centrifugal Pump

Hygienic Design Criteria

Hygienic design for mix proof valve

Hygienic pumps

Intro to Good Manufacturing Practice

Introduction about beer product

Introduction to Food Safety Management Systems

Introduction to FS 22000

Introduction to Multiple effect evaporators

Juice filling machine

Kefir: Biotechnology from Omics perspectives

Kefir: Biotechnology from "~omics" Perspectives

Lemon essential oil and juice extraction

Measuring Principle Capacitance

Measuring principle of electromagnetic inductive flow meter

Metabolomics as an Emerging Strategy for the Investigation of Yogurt Components

Microbiological risk assessment in food safety: exposure assessment

Microbiological risk assessment in food safety: introduction

Multi section pasteurizer gasketed plate-and frame heat exchanger

New U.S. FDA Food Labelling Rules

Organic Ozone sanitation for food & beverage

Pineapple juice extraction

PLC Programming tutorial for beginners Part 1

PLC Programming tutorial for beginners Part 2

Principle of butterfly valve

Principle of electrical conductivity measurement

Process description of mineral water

Process description of soft drinks and syrups

Production of strawberry juice

Production of Vinegar

Production process of Champagne

Production process of tea



Production process of wine

Qualitative Characteristics and Determining Shelf-Life of Milk Beverage Product Supplemented with Coffee Extracts

Rapid and Convenient Monitoring of the Quality of Beverages, Water and Foods

Regulation of Food and Beverage Marketing

Reverse osmosis water purification equipment

Role of food safety & regulation

Rotary Lobe Pump

Rotary mass flow meter colioris liquid filler

Smart technology improves efficiency in the food and beverage industry

Soda packaging innovation

Solid waste and recycling for food & beverage processing facilities

Syrup preparation

Tank cleaning in the sanitary industries

Technology for fermentation and maturation process of beer production

The culturefuge concept

The electromagnetic flow measuring principle

The FDA Nutrition Facts Label - Old vs New FDA Food Labels and Changes

Thermal Inactivation of Wine Spoilage Yeasts to Validate Steam Sanitation Protocols in Wineries

Twin screw pump demonstration

Validating CFD Simulations: Mixing Tank

Vibrionic level measuring principle

Volumetric inline pump filler

Why is ISO 22000:2005 a Global demand?

4 Facts & Figures about the Training Material

As it is shown on Figure 4, all the uploaded materials under the SEA-ABT Project (110 entries) are aimed to students. Most of them are also aimed to Trainers and Teachers, and only a small part is aimed to Professionals.

Deliverable 4.2: Digital Library Page 11 of 14



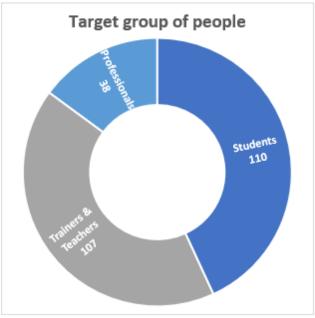


Figure 4: Target group of people to whom the training materials aim.

The training materials submitted by the SEA-ABT Consortium are allocated within the 18 of the total 19 available categories of the Digital Library. Most of the training materials belong to the "processing" category, while the categories of "food engineering" and "quality & safety" follow. The distribution of the training materials among the categories are shown in detail in Figure 5.



Figure 5: Categories in which the training materials belong to.



Additionally, the training materials are distributed into 12 of the total 16 available sectors of the Digital Library (Figure 6). The sectors including most of the training materials are "beverage", "education & training" and "food". On the other hand, some sectors do not contain any training material from the SEA-ABT project.



Figure 6: Sectors in which the training materials belong to.

The training materials of the Digital Library are available in various formats. The materials related to the SEA-ABT Project are mainly available in video format, as shown on Figure 7. Also, web pages are frequent. However, formats such as demonstration, pdf file, webinar, audio and online course do not appear often.

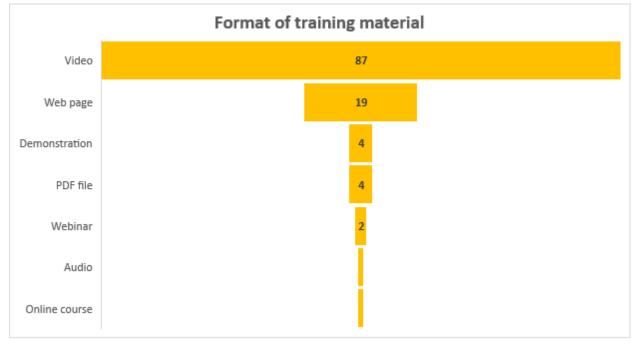


Figure 7: Formats in which the training materials are available.



Last essential feature of the training materials is the language in which the material is produced. As it can be seen on Figure 8, most of the training materials are available in English. However, there are 5 materials only available in Thai language, and a few ones in other languages.

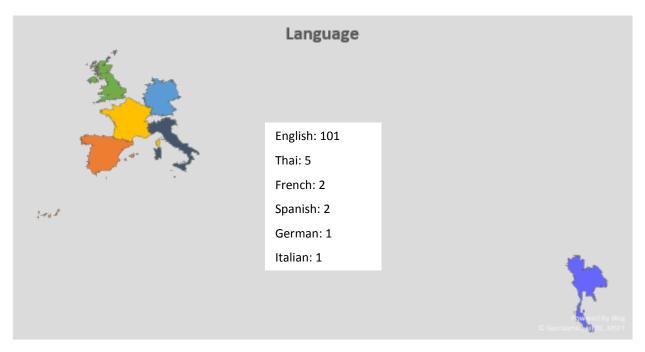


Figure 8: Languages in which the training materials are available.