# \*\* **DRAFT** \*\*

# International Standard for Raw Food Certification

# **Published by**



"RawFood™ Certified" is a Project of the International Center for Integrative Systems, a 501(c) 3 Not-For-Profit Organization

Written comments are due by midnight April 6, 2015

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RAWC 1.0-4.2015 Draft as of March 13, 2015

## RawFoodCertified.Org

RawFoodCertified.Org ("RAWC") is a project of the International Center for Integrative Systems (IS). (See below and www.integrativesystems.org). RAWC has developed a standard that aims to verify the claims and support the growth of the raw food community while enabling transparency for consumers, retailers, manufacturers and the regulatory community. RAWC is a member of ANSI. The standards may be used for conformity assessment, purchaser specifications, and public education. RAWC offers certification of products, services, and companies in conformance with its standards. For additional information on RAWC or any of its programs, contact:

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This is a DRAFT version of a standard for Raw Food Certification. All members of the stakeholder communities interested in Raw Food are invited to review this DRAFT and provide written comments. Stakeholders include:

- Food Processors and Manufacturers
- Food Industry Trade Associations
- Farmers/Food Producers and Growers
- Public Interest and Consumer Advocacy Groups
- Food Distributors and Retailers
- Restaurants
- Federal, State and Regional Government Agencies
- Standards Setting Organizations
- Certifying and Accrediting Organizations
- GMP, HACCP, FDA FSIS and USDA NOP Auditors & Inspectors
- Academicians
- Nutritionists, Health Care Workers and Physicians
- Consumers

There will be a public hearing on this DRAFT standard at the Natural Products Expo West in Anaheim, California between March 4 and March 8, 2015. To find the date, time and location go to http://rawfoodcertified.org

All comments must be received by Midnight on Monday, April 6, 2015 Comments can be mailed to:

RawFoodCertified Standards Comments 701 Concord Avenue Cambridge, MA 02138

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#### **ABSTRACT**

This is a draft standard for certification of "Raw" packaged vegetarian foods. More and more people are incorporating what they believe to be raw foods into their diets principally for health and taste reasons. But there is debate and confusion over what actually constitutes "raw" and what the characteristics should be to maintain a food's 'raw' quality at point of sale and also protect consumers from foodborne diseases. This consensus-based draft standard's criteria incorporate the inputs from the raw food stakeholder community of consumers, public interest groups, growers/farmers, food processors, trade associations, food retail stores, restaurants, regulatory agencies and academicians. The criteria focus on three categories - Safety, Minimal Processing and Bioavailability of nutrients. The Safety criteria are that the item is produced under the auspices of: (1) A Hazard Analysis and Critical Control Points (HACCP) Plan under the USDA Food Safety and Inspection Service (FSIS), (2) The manufacturer uses Good Manufacturing Practices (GMP), (3) The manufacturer registers its food processing facility with the Food and Drug Administration (FDA); and, (4) No food items are packaged which are toxic when raw (uncooked). The Minimally Processed criteria are that the ingredients and completed food are: (1) Certified Organic under the USDA National Organic Program (NOP), (2) Non-Genetically Modified Organisms (non-GMO), (3) Not irradiated; and, (4) Heat treated below 212°F. The Bioavailability criteria are that the product's key molecules collectively maintain at least fifty-percent (50%) of their enzymatic activity as verified by receiving a minimum score of 50 through CytoSolve® testing (CS® Tested<sup>TM</sup>) for enzymatic activity.

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#### 1.0 INTRODUCTION

The raw food industry is undergoing explosive growth as well as a concomitant scrutiny by various stakeholders including consumers, regulatory agencies, retailers and manufacturers. The pervasive questions being posed by these stakeholders is: "What is Raw?" and Is it safe?

When new industries emerge and grow, such as the raw foods industry, such fundamental questions and scrutiny are not uncommon. The best approach to address critical questions of stakeholder groups is to develop consensus-based industry standards and processes for certification. Moreover, history demonstrates that when such standards are developed *bottom up*, starting with and involving the entire stakeholder community, rather than initiated by government or regulatory agencies (*top down*), they have served to advance the industry and address stakeholder concerns.

To this end, *RawCertified.Org* ("RAWC") was formed, as a 501(c) 3 project of the International Center for Integrative Systems in early 2014. RAWC began developing a framework based on a systems approach that integrates quantitative and qualitative measures, in a *Multiple Criteria Decisions Analysis* (*MCDA*), to define "Raw". Starting in May of 2014, RCO began consultations, interviewing and holding individual and group meetings with stakeholders from the raw foods community.

This DRAFT standard captures the efforts of RAWC and key leaders and experts in the raw food community to develop a raw food certification process that defines: *What is Raw?* 

#### 2.0 SCOPE OF THIS STANDARD

This Standard establishes requirements for *RAW FOOD CERTIFICATION* ("RAWC"). The certification of raw foods in this document is limited to certain food groups. These include vegetarian foods (plant matter and food of animal origin which can be sustainably and humanely harvested from animals such as milk from mammals, eggs from birds and honey from bees) that have been minimally processed, not been cooked, are safe, shelf/refrigerator/freezer) stable and have their nutrients in a bioavailable form. The standard includes packaged foods, juices, soups, soy and nut beverages, and prepared foods such as pickles, relishes, slaws, gazpachos, salsas and guacamoles. The standard, at this time, does not cover salads or sprouts (harvested vegetables with no further processing other than washing and packaging). The standard also does not cover raw meat, fish or shellfish.

The food processor seeking certification must be recertified under this standard annually in order to use the RAWFOOD<sup>TM</sup> CERTIFIED imprimatur on their product package and in their advertising. Certification under this standard covers a specific packaged food product at one facility only. A product is the same list of ingredients (other than flavor variations) undergoing the same processing steps and temperatures regardless of ultimate package size. Other food products at the same facility must be certified separately. If the producer manufacturer makes the same food product in multiple locations, all locations must be certified for the product to bear the RAWFOOD<sup>TM</sup> CERTIFIED imprimatur.

#### 3.0 KEY ELEMENTS OF THE STANDARD

The three unique core concepts defining raw food certification are: (1) Safety, (2) Minimally Processed and (3) Bioavailable Nutrients as noted in Fig. 1, below.

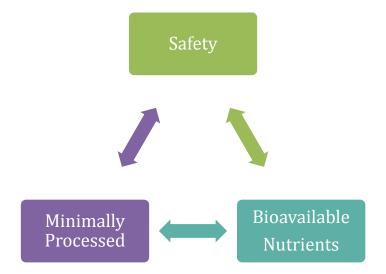


Fig. 1 – Three key elements of Raw Food Certification.

#### 3.1 Safety

- HACCP Hazard Analysis and Critical Control Points<sup>i</sup>
- GMP Good Manufacturing Practices<sup>ii</sup>
- COA Certificate of Analysis
- Registered with the US Food and Drug Administration (FDA)<sup>iiiiv</sup>
- Post Packaging Product Shelf-Life Testing

#### 3.2 Minimally Processed

- Organic Certified<sup>v</sup>
- Non-GMO<sup>vi</sup>
- BELOW 212° Fahrenheit

#### 3.3 Bioavailability

• Minimum score of 50 on CS® Tested<sup>TM</sup> for enzymatic activity

#### 4.0 SAFETY CRITERIA

Foodborne diseases cause approximately 48 million illnesses, 128,000 hospitalizations, and 3,000 deaths in the United States each year<sup>vii</sup>. There are approximately 1,000 reported disease outbreaks (local, regional, and national) each year. Food pathogens are destroyed by, among other measures, elevated temperature. However, excessive heating also renders raw food into cooked food, so to be both safe and raw a rigorous line of prophylaxis must be maintained by food producers. Foods can still

be considered 'raw' as long as the temperature does not destroy the available nutrients in the food. Therefore there must be a careful balance between heating to the point of killing pathogens or heating to dehydrate to make the food shelf stable, while still maintaining the qualities of raw foods.

A large part of the safety issues are addressed with a HACCP Plan. HACCP plans provide a systematic preventive approach to food safety from biological, chemical, and physical hazards in production processes that can otherwise cause the finished product to be unsafe. The HACCP includes measures to reduce these risks to a safe level.

#### 4.1 Hazard Analysis and Critical Control Points (HACCP) Plan

HACCP plans are well defined both in the US and internationally by the Food and Agricultural Organization, FAO. This system goes beyond good hygiene practices and good laboratory practices. The HACCP system clearly identifies food safety problems and also where and how they can be controlled or prevented. To assure that these actions are executed regularly and consistently, they have to be described and people who are responsible for their execution have to be trained. A record-keeping system has to be developed to provide documentation for all actions and measurements. Viiii

#### **Under these directives:**

- 4.1.1 The food processor must develop a HACCP Plan for each food product prepared.
- 4.1.2 The HACCP Plan must require that the food processor:
  - 4.1.2a Conduct a hazard analysis
  - 4.1.2b Identify critical control points
  - 4.1.2c Establish critical limits for each critical control point
  - 4.1.2d Establish critical control point monitoring requirements
  - 4.1.2e Establish corrective actions
- 4.1.2f Establish procedures for ensuring the HACCP system is working as intended (just as periodic testing for specific and generic pathogens in the finished product
  - 4.1.2g Establish record keeping procedures
- 4.1.3 The HACCP must be audited by a third party which is an accredited certifier under ISO 22000 or a member of the Global Food Safety Initiative. If it is not done by the USDA NOP auditor or the GMP auditor, the HACCP audit must include the measurement of temperature and time for the processing each ingredient and/or the produced food product. This becomes an important component in providing the input data for Minimally Processed and Bioavailability.

# **4.2** Registration of the food processing facility with the Food and Drug Administration (FDA) Food Safety Inspection Service (FSIS)

- 4.2.1 If not already registered and the food production facility is within the United States, register at the FDA website  $\frac{\text{http://www.registrarcorp.com/fda-food/usregistration/domestic-food-facility.jsp?lang=en}{\text{http://www.registrarcorp.com/fda-food/usregistration/domestic-food-facility.jsp?lang=en}}$
- 4.2.2 If not already registered and the food production facility is outside of the United States, register at the FDA website  $\frac{\text{http://www.registrarcorp.com/fda-food/registration/food-facility.jsp?lang=en}}{\text{http://www.registrarcorp.com/fda-food/registration/food-facility.jsp?lang=en}}}$

#### 4.3 Good Manufacturing Practices (GMP)

4.3.1 GMP is a requirement of the FDA and a GMP inspection or audit is administered by a regulatory agency. The food processor must demonstrate that they have passed a Good Manufacturing Practices inspection either through documentation provided by the FDA or through the World Health Organization COPP or TRS 823, 863.

4.3.2 If it is not done by the HACCP auditor nor the USDA NOP auditor, the GMP audit must include the measurement of temperature and time for the processing each ingredient and/or the produced food product. This becomes an important component in providing the input data for Minimally Processed and Bioavailability components of the standard.

#### **4.4 Certificate of Analysis (COA)**

- 4.4.1 The food processor must provide a certificate of analysis (COA) for each ingredient it receives which it uses to make raw packaged foods.
- 4.4.2 The COA must come from a lab that is accredited through ISO 17025, the National Voluntary Laboratory Accreditation Program (NVLAP) or some other voluntary or mandatory (varies by state) accreditation program.
- 4.4.3 The COA needs to define frequency of tests per ingredient lot, include pathogens, mold, bacteria etc. to be tested for.
- 4.4.4 The COA also becomes an important component in providing the input data for Minimally Processed and Bioavailability.
- 4.4.5 The COA must not include any of the items in Appendix A in raw (uncooked) form as they are toxic or poisonous in their raw form.
- 4.4.6 The COA may include any of the natural or synthetic compounds on the USDA NOP National List which is reprinted in Appendix B.

#### 4.5 Post-Packaging Product Shelf-Life Testing

- 4.5.1 To the extent that post packaging shelf life testing is not done as part of the HACCP, GMP, USDA NOP audits or FDA FSIS inspections, finished product safety and shelf life testing and analysis will be employed to determine Expiration Date, Best by Date, and Sell by Date for a food product.
- 4.5.2 The laboratory performing this testing will be accredited through ISO 17025, the National Voluntary Laboratory Accreditation Program (NVLAP) or some other voluntary or mandatory (varies by state) accreditation program.
- 4.5.3 The parameters tested for may include:
  - 4.5.3a Food-borne micro-organisms such as Listeria, Salmonella, Campylobacter, E.Coli, Yeasts and Molds, Staphylococcus Aureus, Bacillus Cereus, Lactic Acid Bacteria.
  - 4.5.3b Total viable count
  - 4.5.3c Enterobacteriaceae
  - 4.5.3d Moisture content
  - 4.5.3e Acidity levels pH
  - 4.5.3f Water activity
  - 4.5.3g Fat rancidity

#### 5.0 MINIMALLY PROCESSED CRITERIA

The multiple processes conventional foods undergo from farm to table are so extensive and debilitating that many argue that foods, thus produced, are nutrient barren and flavorless or dull. In many ways, 'raw' is the opposite of cooked and processed foods and so a standard for raw seeks foods that are minimally processed. Some foods must be processed to provide for consumer safety. The criteria that evidence minimally processed for this standard are **Organic**, **Non-GMO** and **Heated Below 212°F.** 

#### 5.1 Organic

All prepared packaged foods seeking certification under this standard and ingredients must be certified organic under the USDA National Organic Program (NOP) and have the following attributes:

- 5.1.1 have not been grown with artificial fertilizers
- 5.1.2 have not been treated with pesticides, herbicides or fungicides
- 5.1.3 use natural inputs and/or approved synthetic substances on the National List (Appendix B)
- 5.1.4 have not been grown in chemical sludges
- 5.1.5 have not been irradiated
- 5.1.6 are grown and managed under an Organic System Plan
- 5.1.7 if it is not done by the HACCP auditor nor the GMP auditor, the USDA NOP auditor must include the measurement of temperature and time for the processing each ingredient and/or the produced food product. This becomes an important component in providing the input data for Minimally Processed and Bioavailability.

#### 5.2 Non-GMO

A genetically modified organism (GMO) is any organism whose genetic material has been altered using genetic engineering techniques beyond ordinary breeding and cross breeding techniques. This standard does not allow GMO food products to be certified since they have been manipulated beyond regular natural selection. All prepared packaged foods seeking certification under this standard and the ingredients in same should not contain foods that are derived from genetically modified organisms (non-GMO) as evidenced by certification under the USDA NOP.

5.2.1 In the case where the USDA NOP audit does not certify that all the top 10 ingredients are non-GMO (for examples for USDA "Made With Organic Ingredients" certification wherein only 70% of the foods need to be organic) and the COAs do not certify that the top 10 COAs are non-GMO then the manufacturer will have the top 10 ingredients tested for GMOs using a laboratory that is accredited under USDA NOP and/or a laboratory that is accredited through ISO 17025, the National Voluntary Laboratory Accreditation Program (NVLAP) or some other voluntary or mandatory (varies by state) accreditation program.

#### 5.3 Heated Below 212°F

- 5.3.1 Neither the completed packaged food nor any of the ingredients may be heated so that they have a temperature of 212°F or higher.
- 5.3.2 The exceptions to this are when Federal, State or local regulations legally requires an ingredient or the entire food item to be heated at or above 212°F. A regulatory exemption to the temperature treatment threshold does not impact the Bioavailability score (see 6.0 below).

# 6.0 BIOAVAILABILITY OF NUTRIENTS CRITERIA

Broadly defined, Bioavailability refers to the proportion of a nutrient that is absorbed from the diet and used for normal body functions; participating in and supporting many metabolic pathways. Bioavailability of a nutrient is governed by external and internal factors. External factors include the food matrix and the chemical form of the nutrient in question, whereas gender, age, nutrient status and life stage (e.g. pregnancy) are among the internal factors. Because aspects such as nutrient status also determine whether and how much of a nutrient is actually used, stored or excreted, some definitions of Bioavailability restrict themselves to the fraction of a nutrient that is absorbed.<sup>ix</sup>

The Bioavailability of macronutrients – carbohydrates, proteins, fats – is usually very high at more than 90% of the amount ingested. On the other hand, micronutrients, i.e. vitamins and minerals, and bioactive phytochemicals (e.g. flavonoids, carotenoids) can vary widely in the extent they are absorbed and utilised. If they are denatured and destroyed by food processing procedures, obviously they are not biologically available.

This standard deals with the bioavailability of micronutrient molecules in foods.

Besides the basic nutritional building blocks of proteins, amino acids, sugars, carbohydrates and fatty acids there are specific health attributes to specific proteins, terpenoids and fatty acids. There are a myriad of beneficial proteins, enzymes, vitamins, cytochromes, phytochromes, antioxidants and terpenoids, which exist if food is grown organically and harvested and processed at ambient temperatures. These compounds may not be present in GMO plants nor in plants grown in nutrient depleted soils, which are chemically fertilized. Many of these same compounds denature (permanently loose effectiveness) and disappear at the elevated temperatures required of cooking.

#### 6.1 How Bioavailability is Determined

For a product, using the ingredient data from the certificate of analysis of both type and weight, and the processing temperature from the HACCP or GMP audit, the top 10 ingredients, which are non-water and non-National List (USDA NOP) ingredients, are itemized for that product to create a listing of up to 10 ingredients. For each ingredient in this list of up to 10 ingredients, that will include proteins, enzymes, essential fatty acids, the top three molecules by weight per ingredient are then itemized to create a list for a total of up to 30 molecules per food product (3 molecules times 10 ingredients).

This listing of up to 30 molecules is submitted for CytoSolve® testing (CS® Tested) for an enzymatic activity analysis to receive an enzymatic activity score. The score is a number ranging from 1 to 100. The CytoSolve® testing (CS® Tested) process is executed per the CS 1.0-4.2015 Draft Standard.<sup>x</sup> If a certification score from CS® Tested of 50 is received, then bioavailability criteria is satisfied.

While heating an ingredient or food product to 211°F is permitted under the 5.3 Minimally Processed provision of this standard, if you do so for longer than a very brief instant of time, the probability is high that the enzymes will have been denatured and will not meet the requirements of 6.1 for 50% or more of the enzymes to remain active and viable. Section 6.2 provides guidelines for increasing the probability for enzymatic activity in the finished product.

#### 6.2 Suggestions for Heat Treatment to Retain Bioavailability

The following guidelines are offered for maximum heating temperatures and times to help ensure that the majority of enzymes do not become denatured and remain viable.

- 6.2.1 heated to no more than 118°F for an extended period of time
- 6.2.2 heated for more than 5 minutes to no more than 161°F
- 6.2.3 heated to 165°F for no more than 15 seconds
- 6.2.4 heated to 175°F for no more than 10 seconds
- 6.2.5 heated to 180°F for no more than 5 seconds
- 6.2.6 heated to 200°F for no more than 2 seconds

Following the above guidelines is <u>not</u> a guaranty that the food item will pass the 50% viable enzyme requirement for Bioavailability. This will only be ascertained after the product data has been submitted for CS® Testing. Similarly, ingredients that, due to regulation, are exempted from the standard's

heating ceiling (5.3) must still pass the Bioavailability criteria of greater than 50% viable enzymes in order to gain certification.

#### 7.0 STEPS TO CERTIFICATION OF A RAW FOOD PRODUCT

Certification is evidence to the consumer by the placement of the RAWFOOD<sup>TM</sup> CERTIFIED imprimatur proximal to the USDA NOP label along with a number stating the percent of viable nutrient bioavailability. By satisfying all three criteria, a product is RAWFOOD<sup>TM</sup> CERTIFIED.

A food processing company can submit the information directly or it may be done by a certified independent auditor. Certification could be via the manufacturer directly or via a certified auditor (see Section 10 below). The steps to certification are: (1) Registration, (2) Bioavailability Certification, (3) Verification of Safety and Minimally Processed Criteria, and (4) Issuance of Certification.

During Registration, RAWFOOD<sup>TM</sup> CERTIFIED does not require full payment, but only a portion of the payment. By way of example, suppose a company has 40 food products, 2 facilities and the company generates \$10 million in revenue (revenue is used to determine size of company), the total investment quote of \$X will be provided to the company. Of this \$X, \$Y (where \$Y is less than \$X), will be required for immediate payment to perform the Bioavailability analysis that will provide the status of CS® Tested certification of all 40 products. For those products that receive a score of 50 or more from the CS® Tested certification process, then the remainder of the fee will need to be paid to proceed to Verification. In the event only a subset of the 40 products meet the 50 score, then the fee for verification (\$X minus \$Y) will pro-rated.

#### 7.1 Step 1: Registration

- 7.1.1 Access the website RawFoodCertified.org at www.rawfoodcertified.org
- 7.1.2 Create a company account on the website
- 7.1.3 Input the number of food products, number of facilities, and size of company
- 7.1.4 Receive a quote for the total investment for certification
- 7.1.5 Make initial payment for the bioavailability analysis

#### 7.2 Step 2: Bioavailability Criteria

- 7.2.1 For each product, provide information about the names of ingredients, weigh percentage of the ingredients in the product, temperature at which the product is processed and duration of processing.
- 7.2.2 Allow two weeks' time for access the enzymatic activity score using CS® Tested process as detailed in CS 1.0-4.2015 Draft Standard.

#### 7.3 Step 3: Receive CS® Tested Certification Results for Products

- 7.3.1 Receive the enzymatic activity score from CS® Tested process for all the products.
- 7.3.2 Only the products with score of 50 or more will satisfy the Bioavailability criteria and will be awarded CS® Tested certification.
- 7.3.3 Receive a second price quote for the verification of Safety and Minimally Processed criteria based on the number of products that meet the Bioavailability criteria.
  - 7.3.4 Make payments for verification of Safety and Minimally Processed criteria.

# **7.4 Step 4: Submit Verification Information for Safety and Minimally Processed Criteria** *Safety Criteria:*

For each product that scores more than 50 on enzymatic bioactivity, the manufacturer or the Certified Auditor will:

- 7.4.1 Upload or scan in copies of all food products' COAs with information identifying the third party which did the analysis and their accreditation credentials
- 7.4.2 Upload or scan in copies of the FDA GMP audit
- 7.4.3 Upload or scan in copies of the HACCP Plan and Plan audit with information identifying the third party which did the audit and their accreditation credentials
- 7.4.4 Upload or scan in copies of FDA registration
- 7.4.5 Upload or scan in copies of the Shelf Life Analysis (as per 4.5 above) with information identifying the third party which did the audit and their accreditation credentials

#### Minimally Processed Criteria:

For each product that scores more than 50 on enzymatic bioactivity, the manufacturer or the Certified Auditor will:

- 7.4.6 Upload or scan in copies of organic certification (e.g. USDA NOP, or others)
- 7.4.7 If the USDA NOP certification is not 100% organic and the COAs do not indicate 100% non-GMOs, upload or scan in copies of the laboratory tests that evidence 100% of the ingredients are non-GMO as per 5.2 above along with the accreditation credentials of the testing laboratory.

#### 7.5 Step 5: For Multiple Products from the Same Facility

- 7.5.1 Multiple products from the same facility seeking RAWFOOD<sup>TM</sup> CERTIFICATION need only upload or scan in the evidence of FDA facility registration and FDA GMP audit once for all the foods seeking certification from the same facility.
- 7.5.2 Food processors must still upload or scan in the COAs, HACCP Plan and audit and shelf life date for all of the products seeking certification from the same facility.

#### 7.6 Step 6: For Single Products from Multiple Facilities

7.6.1 For a single product which is coming from multiple facilities, the manufacturer must submit all the FDA facilities registrations and all of the FDA GMP audit results for all the facilities where the product is manufactured.

#### 7.7 Step 7: For Multiple Products from Multiple Facilities

7.7.1 For multiple products coming from multiple facilities, all of the product certification and all of the facility certifications must be submitted.

#### 8.0 HOW TO USE THE RAWFOOD™ CERTIFIED SEAL

Once the submitted documents are assessed and approved by RawofoodCertifed.org, the firm may receive a certification for RAWFOOD<sup>TM</sup> CERTIFIED.

When a product gains certification the manufacturer may:

- Use the certification imprimatur on product packaging, product advertising and product literature.
- Use the enzyme/protein/terpinoid breakdown information on the product packaging received from the CS® Tested certification analysis, in any product literature and advertising.
- Use the term "Certified Raw" or "Raw Certified" or "Raw" if all the ingredients meet the requirements for RAWC with a bioavailability score of 50 or above.

- Use the term "RAWFOOD<sup>TM</sup> CERTIFIED #", or "RAWC<sup>TM</sup> #" where "#" represents the level of Bioavailability from CS® Tested. By way of example, if the Bioavailability score from CS® Certification testing is 75, then one may use the term "RAWFOOD<sup>TM</sup> CERTIFIED 75" or "RAW<sup>TM</sup> 75"
- Note: All agricultural ingredients in the product must be either raw or not commercially
  available in raw form. All non-organic agricultural ingredients must not be genetically
  engineered; irradiated; produced from sewage sludge; or be produced with a volatile synthetic
  substance. All non-agricultural ingredients and processing aids used must be approved on the
  National List (see Appendix B).
- Note: Certification for each product must be repeated annually to carry the imprimatur.

# 9.0 ACCREDITATION OF CERTIFYING BODIES AND CERTIFYING AUDITORS

In the Unites States, the American National Standards Institute (ANSI) accredits the organizations that certify that products and personnel meet recognized standards. The ANSI\_ASQ National Accreditation Board (ANAB, <a href="http://anab.org/about-anab/">http://anab.org/about-anab/</a> is the U.S. accreditation body for most quality management systems including ISO 22000 food safety management systems. In addition ANSI provides laboratory accreditation for testing and calibration laboratories.

The accreditation process primarily recognizes the competence of the testing, certifying and inspecting organizations. In addition staff of these organizations can also be certified as competent individuals, assessors, auditors or lab personnel. The accreditation body must show that their staff are competent and met a standard such as ISO/IEC guide 55, or ISO/TEC 17021

There is no current national accreditation process for RAWC, therefore this standard proposes the following to ensure that the certifiers and individual assessors are competent authorities and capable of the RAWFOOD<sup>TM</sup> Certification process.

Once an organization is accredited its trained auditors/assessors may carry out compliance audits against the RAWFOOD $^{TM}$  criteria.

One of the key benefits of being accredited and registered with RawFoodCertified.org is the entire process of determining raw by using the multi-decision criteria of (1) Safety, (2) Minimally Processed, and (3) Bioavailability

#### 9.1 Accreditation of Raw Food Certifying Bodies and Auditors

Organizations that have been accredited by ANSI-ANAB under ISO/IEC 17025, or any other relevant conformity assessment scheme, may also become "Raw Food Certifiers", and may be accredited by RawFoodCertified.Org. These may include those accredited under a recognized European accreditation Board. Qualified and certified staff of such accredited organizations can become recognized certified auditors under this Raw Foods Standard.

9.1.1 Candidates for Accredited Raw Food Certifying Bodies
Possible "Raw Food Certifiers" accreditation may be conferred to organizations that have been accredited under:

- ISO 17020 Inspection Body accreditation
- ISO 17021 Management system certifying bodies' accreditation

- ISO 17025 Calibration and test labs accreditation
- ISO 15189 Medical and clinical laboratories accreditation
- ISO Guide 34 Reference material producers accreditation
- ISO 22000 Food safety management systems
- European Cooperation for Accreditation<sup>xi</sup>

However if any of the accredited bodies do not normally deal with food and food ingredients they must demonstrate their added expertise in the area of food safety.

#### 9.1.2 Candidates for Certified Auditors

The following staff may be eligible for certification:

- 9.1.2.a HACCP auditors who are trained auditors under ISO 22000 or are trained auditors acceptable for the Global Food Safety Initiative (auditors meet ISO/IEC Guide 65 or ISO/IEC 17021.)
  - 9.1.2.b USDA NOP auditors who are accredited USDA NOP certifiers
- 9.1.2.c Staff of testing laboratories which are accredited through ISO 17025, or any similar ISO or European program, or the National Voluntary Laboratory Accreditation Program (NVLAP) or some other voluntary or mandatory (varies by state) accreditation program. Laboratories that are not directly involved with food must demonstrate their capability in the testing of food ingredients.

#### 9.2 Application Process for Accreditation and Certifying Staff.

To become an accredited Raw Food Certifying Body, the above candidate organizations must apply to RawFoodCertified.Org, create an account and demonstrate their and their staff's competence as follows:

- 9.2.1 Access RawFoodCertified.org (www.rawfoodcertified.org) Certifier tab
- 9.2.2 Create a Certifier's account
- 9.2.3 Enter information on their current accreditation, who did the accreditation and date of accreditation;
- 9.2.4 Enter the number and names of the trained individual auditors in the organization seeking accreditation, including their training and year of certification by relevant organization
- 9.2.5 Make payments according to the quoted price
- 9.2.6 Upload or email scanned documentation of current ISO 22000, Global Food Safety Initiative, USDA NOP, ISO 17025 or NVLAP or any other accreditation and certification
- 9.2.7 Proposed auditors must also acknowledge their understanding of the Raw Food Certification process as described in this draft standard

#### 9.3 Evaluation of the application by RawFoodCertified.org.

- 9.3.1 Once the application is received, RawFoodCertified.org will evaluate the submitted information. If the information is satisfactory the certifying firm will be recognized as an Accredited Raw Food Certifier.
- 9.3.2 Each individual auditor is also evaluated by RawFoodCertified.org and if approved, will become a Certified Raw Food Auditor, capable to audit firms according to the raw food certification scheme.

#### 9.4 Access to Bioavailability model

9.4.1 Once the application is approved and accepted, the accredited raw food certifier and its auditor staff will be able to submit the data for enzymatic score analysis for CS® Tested certification.

# 10. GUIDE TO AUDITING PROCESS ACCREDITED RAW FOOD CERTIFIERS

To maintain the RAWC, the food processor must agree for an audit process to make sure that the products, facilities and processing meet the multi-decision criteria of (1) Safety, (2) Minimally Processed, and (3) Bioavailability. The audit process is based on the scheme proposed by the Global Foods Safety Initiative. xii The steps are as follows.

#### 10.1 The audit scheme

- 10.1.1 The audit starts with an administration process on agreed dates, time frames, and product testing scheme, which becomes the basis of a contract between the auditor and the food processor. The certification audits are always non-consultative. This means the auditor is not allowed to instruct or advise.
- 10.1.2 The audit should be scheduled on a date that is preferably within a peak production period. The audit determines a) how well a facility identifies and implements food safety controls to comply with the requirements of this standard; b) how well the facility controls the minimum processing requirements c) a testing of Bioavailability carried out via CS® Tested process.
- 10.1.3 The auditor assesses the safety of the product, according to section 7.4 above, reviews HACCP plans, procedures, policies, physical conditions and records and observes the implementation of the plans in the factory. These plans will be then uploaded to the RawFoodCertified.Org website.
- 10.1.4 The auditor also assesses the minimum processing information as per section 7.4 above.
- 10.1.5 A formal report is prepared by the auditor to a format laid down by the scheme. To achieve certification, the food facility is required to correct all non-conformances and to prevent their recurrence. A time frame for corrective action is developed with the auditor.
- 10.1.6 RawFoodCertified.Org will then review the evidence submitted and decides whether to accept or request a resubmission. In some cases, which may be prescribed by the scheme, a further site visit may be required to verify closure.
- 10.1.7 The auditor submits information on Bioavailability to the RawFoodCertified.Org computer model. The results of this are conveyed to the auditor and to the firm.
- 10.1.8 The final decision on certification is not with the auditor but with RawFoddCertified.Org 10.1.9 Annual recertification is required. The rules may vary according to the scheme but typically timing will be close to the date of the initial certification audit.

#### GLOSSARY OF TERMS AND ACRONYMS

**CS** - CytoSolve - CytoSolve is a technology that provides in silico analysis of multi-combination ingredients based on molecular pathway modeling of particular biological phenomenon.

**COA** – Certificate of Analysis

**CoPP** – Certificate of Pharmaceutical Product – The certificate of pharmaceutical product (CPP or CoPP) is a certificate issued in the format recommended by the World Health Organization.

**FDA** – The US Food and Drug Administration

**HAACP** - Hazard Analysis and Critical Control Points Plan (HACCP) is an approach to food safety that is systematic and preventive. It is recommended by the Codex Alimentarius Commission, the United Nations international standards organization for food safety. HACCP is used by most countries around the world. It has been in use since the 1960s.

**GMO** – Genetically Modified Organism is an organism whose genome has been altered by the techniques of genetic engineering so that its DNA contains one or more genes not normally found in that species.

**Global Food Safety Initiative -** Established in 2000, the Global Food Safety Initiative is a business driven initiative for the continuous improvement of food safety management systems to ensure confidence in the delivery of safe food to consumers worldwide. It is managed by the <u>Consumer Goods Forum</u>. There is no accreditation process but the status of recognition is achieved through a comprehensive benchmarking process. An independent third party auditor assesses a specific process against an agreed set of benchmarks.

**GMP** – Good Manufacturing Practices. This audit is required by the FDA for all food processing facilities

**ISO 17025** – The International Standards Organization's General requirements for the competence of testing and calibration laboratories

MCDA - Multiple Criteria Decisions Analysis is a systems approach that integrates quantitative and qualitative measures

**NOP** – The USDA's National Organic Program

**National List Ingredients**: - The Organic Foods Productions Act of established a National List of Allowed and Prohibited Substances which identifies synthetic substances that may be used, and the nonsynthetic substances that cannot be used, in certified organic production and handling operations.

**NON-GMO** – Not a genetically modified organism.

**NVLAP** - National Voluntary Laboratory Accreditation Program

**Product** – A packaged food that, regardless of the various package sizes and shapes, has a unique mixture of ingredients (other than flavor enhancements/seasonings) that is processed in a unique, distinctive manner.

TRS 823, 863 is the World Health Organizations equivalent of the FDA GMP

**USDA** – United States Department of Agriculture

# **Appendix A - Poisonous or Toxic Raw Foods**

- i) raw bitter almonds
- ii) raw cassava
- iii) raw kidney beans
- iv) raw rhubarb
- v) raw green potatoes
- vi) raw ackee
- vii) raw elderberry
- viii) raw lima beans
- ix) raw taro
- x) raw parsnip
- xi) raw soybean
- xii) raw fava bean
- xiii) raw snow mushrooms (Gyromitra Montana, morels (*Morchella* sp.), hedgehog mushrooms (Hydnum repandum), oyster mushrooms (*Pleurotus* sp.) Chanterelles (*Cantharellus cibarius*, *C. formosus*, etc.) and King boletes (Boletus edulis)

# **Appendix B - The National List of Allowed and Prohibited Substances** (under USDA NOP)

- 1. Evaluation criteria for allowed and prohibited substances (harmonized to §205.600)
- 2. Synthetic substances allowed for use in raw food production (§205.601)
- 3. Nonsynthetic substances prohibited for use in raw food production (§205.602)
- 4. Nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as "raw" or "made with raw (specified ingredients or food groups(s))" (§205.605)
- 5. Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as "raw" (§205.606)

The following nonagricultural substances may be used as ingredients in or on processed products labeled as "raw organic" or "made with raw organic (specified ingredients or food group(s))" only in accordance with any restrictions specified in this section.

Nonsynthetics allowed:

- (1) Acids
  - (i) Alginic
  - (ii) Citric produced by microbial fermentation of carbohydrate substances
  - (iii) Lactic
- (2) Bentonite
- (3) Calcium carbonate
- (4) Calcium chloride
- (5) Colors, nonsynthetic sources only
- (6) Dairy cultures
- (7) Diatomaceous earth food filtering aid only
- (8) Enzymes must be derived from edible, nontoxic plants, nonpathogenic fungi, or nonpathogenic bacteria
- (9) Flavors, nonsynthetic sources only and must not be produced using synthetic solvents and carrier systems or any artificial preservative.
- (10) Kaolin
- (11) Magnesium sulfate, nonsynthetic sources only
- (12) Nitrogen oil-free grades
- (13) Oxygen oil-free grades
- (14) Perlite for use only as a filter aid in food processing
- (15) Potassium chloride
- (16) Potassium iodide
- (17) Sodium bicarbonate
- (18) Sodium carbonate
- (19) Waxes nonsynthetic
  - (i) Carnauba wax
  - (ii) Wood resin
- (20) Yeast nonsynthetic, growth on petrochemical substrate and sulfite waste liquor is prohibited
  - (i) Autolysate
  - (ii) Bakers
  - (iii) Brewers
  - (iv) Nutritional
- (v) Smoked nonsynthetic smoke flavoring process must be documented.

#### Synthetics allowed:

- (1) Alginates
- (2) Ammonium bicarbonate for use only as a leavening agent
- (3) Ammonium carbonate for use only as a leavening agent
- (4) Ascorbic acid
- (5) Calcium citrate
- (6) Calcium hydroxide
- (7) Calcium phosphates (monobasic, dibasic, and tribasic)
- (8) Carbon dioxide
- (9) Chlorine materials disinfecting and sanitizing food contact surfaces, Except, That, residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act.
  - (i) Calcium hypochlorite
  - (ii) Chlorine dioxide
  - (iii) Sodium hypochlorite
- (10) Ethylene allowed for postharvest ripening of tropical fruit
- (11) Ferrous sulfate for iron enrichment or fortification of foods when required by regulation or recommended (independent organization)
- (12) Glycerides (mono and di) for use only in drum drying of food
- (13) Glycerin produced by hydrolysis of fats and oils
- (14) Hydrogen peroxide
- (15) Lecithin bleached
- (16) Magnesium carbonate for use only in agricultural products labeled "made with organic (specified ingredients or food group(s))," prohibited in agricultural products labeled "organic"
- (17) Magnesium chloride derived from sea water
- (18) Magnesium stearate for use only in agricultural products labeled "made with organic (specified ingredients or food group(s))," prohibited in agricultural products labeled "organic"
- (19) Nutrient vitamins and minerals, in accordance with 21 CFR 104.20, Nutritional Quality Guidelines For Foods
- (20) Ozone
- (21) Pectin (low-methoxy)
- (22) Phosphoric acid cleaning of food-contact surfaces and equipment only
- (23) Potassium acid tartrate
- (24) Potassium tartrate made from tartaric acid
- (25) Potassium carbonate
- (26) Potassium citrate
- (27) Potassium hydroxide prohibited for use in lye peeling of fruits and vegetables
- (28) Potassium iodide for use only in agricultural products labeled "made with organic specified ingredients or food group(s))," prohibited in agricultural products labeled "organic"
- (29) Potassium phosphate for use only in agricultural products labeled "made with organic (specific ingredients or food group(s))," prohibited in agricultural products labeled "organic"
  - (30) Silicon dioxide
  - (31) Sodium citrate
  - (32) Sodium hydroxide prohibited for use in lye peeling of fruits and vegetables
  - (33) Sodium phosphates for use only in dairy foods
  - (34) Sulfur dioxide for use only in wine labeled "made with organic grapes," Provided, that, total sulfite concentration does not exceed 100 ppm.
  - (35) Tocopherols derived from vegetable oil when rosemary extracts are not a suitable

alternative (36) Xanthan gum

Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as organic or made with organic ingredients.

The following nonorganically produced agricultural products may be used as ingredients in or on processed products labeled as "organic" or "made with organic (specified ingredients or food group(s))" only in accordance with any restrictions specified in this section.

Any nonorganically produced agricultural product may be used in accordance with the restrictions specified in this section and when the product is not commercially available in organic form.

- (a) Cornstarch (native)
- (b) Gums water extracted only (arabic, guar, locust bean, carob bean)
- (c) Kelp for use only as a thickener and dietary supplement
- (d) Lecithin unbleached
- (e) Pectin (high-methoxy)

# **Appendix C – Public Hearing 1**

Online Public Hearing held online on February 2, 2015 from 2 PM to 3 PM (EST)
Presentation Link: www.join.me/vashivalive
Conference Call Phone No.: 1-712-432-1630
Meeting Code: RAW-FOOD (729-3663) #

### Agenda

- 1. Introduction Dr. Shiva Ayyadurai, Ph.D.
- 2. Presentation Dr. Shiva Ayyadurai, Ph.D.
- 3. Discussion and Questions Attendees (See meeting notes)

### **Meeting Notes**

- 1. The meeting began at 2.05 PM.
- 2. Dr. V.A. Shiva Ayyadurai welcomed the attendees, thanked them for coming together as a community.
- 3. Dr. V.A. Shiva Ayyadurai presented the draft of the Raw Food Standard.
- 4. Dr. V.A. Shiva Ayyadurai used a PowerPoint presentation to review the effort over the past year, the various meetings, the various workshops held, to derive the current standard.
- 5. Dr. Ayyadurai's presentation ended at 2.25 PM.
- 6. Scott Jensen, Rhythm Superfoods: What is the basis of the temperature-time guidelines in section 6.2 of this document?
  - Resolution: These guidelines are based on a general literature review of current food processing practices. These guidelines will improve with time as new and accurate data comes from the CytoSolve® Tested analysis of ingredients from the manufacturers
- 7. Sequoia Cheney, Wonderfully Raw: Some of the ingredients that go into the raw food products are not 100% organic. How can this be resolved in the current standard?
  - <u>Resolution</u>: Dr. Ayyadurai suggested that the standard can be modified to include the USDA definition of 'Made with organic ingredients', which calls for >70% of the ingredients to be organic, to resolve the issue.
- 8. Robert Freeland, Go Raw: How the time taken for the certification can be optimized so that it does not prolong the product life cycle.
  - <u>Resolution</u>: Dr. Ayyadurai clarified that the time consuming part for the certification process are 'Safety' (section 4) and 'Minimally Processed' (section 5) criteria. Items 4.1 through 4.4

- and 5.1 can be done by/obtained from a provider of organic certification while simultaneously performing the 'Bioavailable' (section 6) criteria, which will bring in process efficiency and reduction in time for Certification process.
- 9. A discussion arose on the imprimatur for the certification. There was a consensus that the imprimatur could be a symbol so that it doesn't occupy too much space on the packaging. Also, a black and white as well as a condensed (abbreviated) version of the imprimatur needs to be created.

# **Attendee List**

Attendee ID	Name	Organization	Email
1	Blessing Horowytz	Alive and Radiant	blessingalive@gmail.com
2	Tristan Kampman	Alive and Radiant	tristan@livingbrandscompany.com
4	Sequoia Cheney	Wonderfully Raw	sequoia@mycocoroons.com
5	Robert Freeland	Go Raw	rob@goraw.com
6	Scott Jensen	Rhythm Superfoods	sjensen@rhythmsuperfoods.com
7	Susan O'Brien	Hail Merry	suobrien@hailmerry.com
9	Joshua McHugh	Living Intentions	Joshua@livingintentions.com
10	Alison Brushaber	Hail Merry	abrushaber@hailmerry.com

# **Appendix D – Public Hearing 2**

A Public Hearing held at Expo West on March 7, 2015 from 8.30 AM to 10.00 AM (PST) in Room 209 A, Anaheim Convention Center, Anaheim, CA

# Agenda

- 1. Introduction David Lafferty, Whole Foods Inc.
- 2. Presentation Dr. Shiva Ayyadurai, Ph.D.
- 3. Discussion and Questions Attendees (See meeting notes)

## **Key Findings**

- 1. Clear and unanimous consensus on the definition of "Raw Food" being bounded by the three elements of safety, minimally processed, and bioavailability of enzymes, as defined in the Standard
- 2. A recognition that the "Raw Food" standard is actually a superset of defining food that is "truly healthy," "consciously made," "a gold standard."
- 3. A clear consensus that this standard can be used to label foods and products that are not just "raw" but comply to a rubric of products that are "truly healthy," "consciously made," "a gold standard."
- 4. Relative #3, there was also a consensus that we should perhaps label the standard as "Raw Food" but **something else**.
- 5. Relative #4, the community agreed that a homework assignment for all the attendees to come back with what to name that "something else"
- 6. Relative #5, there was also a consensus that whatever we name that "something else", raw would become a subset of that "something else." By way of example, if a symbol of a GOLD STAR is the label for that "something else," then the GOLD STAR adjacent to the term "RAW" would be the label for "Raw Foods" that were processed with significantly less heat while compliant to higher safely standards.
- 7. The following were outstanding items to be addressed in the final Standard:
  - a. For food that is processed at lower temperatures, the enhanced safety guidelines need to be enumerated.
  - b. What should be the cut-off for the bioavailability criteria; currently it is 50%.
  - c. What should be the name of imprimatur?

### **Meeting Notes**

- 1. The meeting began at 8.40 AM.
- 2. Mr. David Lafferty from Whole Foods welcomed the attendees, thanked them for coming together as a community and introduced Dr. Ayyadurai.
- 3. Dr. V.A. Shiva Ayyadurai from RawFoodCertified.Org presented the draft of the Raw Food Standard.
- 4. Dr. V.A. Shiva Ayyadurai used a PowerPoint presentation to review the effort over the past year, the various meetings, the various workshops held, to derive the current <u>Standard</u> (http://www.rawfoodcertified.org/get-certified.asp).
- 5. Dr. Ayyadurai's presentation ended at 9.00 AM.
- 6. Questions and answers continued until 10.05 AM.
- 7. Steven Brown, Brad's Raw, asked about how the processing temperature range affects the enzymatic score.
  - <u>Resolution</u>: Dr. Ayyadurai clarified that in addition to the temperature, the duration of heating also has significant impact on the enzymatic score. Manufacturer seeking certification would have to provide not only the processing temperature but also processing steps and temporal duration.
- 8. Ease Oldham, Easy Living Foods, asked about the enzyme activity difference in soaked and unsoaked almonds and how flash pasteurization of almonds affects the enzyme activity in almonds.
  - Resolution: Dr. Ayyadurai said the bioavailability criteria determination takes into account the processing steps such as soaking to calculate enzyme activity. It was clarified that even after flash pasteurization, there is a significant amount of enzymes that are still bioavailable inside the almonds. In summary, we recognize that the enzymatic activity calculations have a degree of uncertainty; however, the CytoSolve® enzymatic analysis method would take into account variations in processing and incorporate the known science from the literature available to CytoSolve.
- 9. Arthur Pergament, Brad's Raw Food, shared with us some of his experience in doing single ingredient enzymatic testing and asked how the method used in the Standard was different.
  <u>Resolution</u>: Dr. Ayyadurai explained the bioavailability of enzyme analysis, given a products' complexity of multiple ingredients would be cost prohibitive because of the cost of reagents for the testing of 100s of enzymes. CytoSolve's in silico modeling provides a framework for

- capturing an understanding of this complexity in meaningful and cost effective way based on mining and integrating the scientific literature.
- 10. Susan O'Brien, Hail Merry, pointed out that in the bioavailability calculation, the macronutrients such as essential fats are not considered in the Standard.
  - <u>Resolution</u>: Dr. Ayyadurai thanked Ms. O'Brien for pointing out the omission and the draft will be revised to ensure essential fatty acids are part of bioavailability criteria.
- 11. A general discussion among multiple attendees arose on the inclusion of temperature in defining raw food. It was agreed that minimal processing and safety are key criteria. Tristan Kampman, Alive and Radiant, suggested that the Standard provides us an opportunity to capture the real essence of "Raw Food."
- 12. Dr. Ayyadurai pointed out that in ancient and traditional systems of healing, including in indigenous cultures, food preparation was governed by the notions of safely, minimally processed and bioavailability of enzymes. He gave the example of the south Indian dish of "Idlee."
- 13. Blessing Horowytz, Alive and Radiant, also acknowledged that the Standard was capturing a true definition of what is healthy food that is based on **bioavailability enzymatic activity**/ that captures the notion of what is truly a "consciously" made food and not based on just temperature alone, and this would be beneficial for all the stakeholders.
- 14. Artemis Keszainn, New Earth Center, further emphasized such definition and suggested that the name for such certification would be key in broader acceptance of the standard. It could have subcategories that may relate to Raw Food, Vegan, Paleo, etc.
- 15. Ease Oldham, Easy Living Foods, added that under the new certification, the raw component can be associated with lower temperature since the majority of consumers associate Raw with lower processing temperature.
- 16. Sarah Palisi Chapin, Hail Merry, emphasized the importance of safety and bioavailability in defining the new standard.
- 17. David, Whole Foods, agreed to the importance of the Raw Food standard as it bridges the gap between self-proclaiming entities and the companies that comply with the Standard.
- 18. A discussion arose on the types of certifications such as top-down certification (mandated by a government agency, such as FDA) or bottoms-up certification (arrived at by consensus from the stakeholder community, such as the Raw Food Certification).
- 19. Alison Brushaber, Hail Merry, emphasized the safety element for the Raw Food Certification and shared their experience with FDA on safety standards.

- 20. Robert Freeland, Go Raw, asked whether there is a conflict of interest because of the use of CytoSolve as the technology for accessing the bioavailability.
  - Resolution: Dr. Ayyadurai clarified that the Standard is a project of International Center for Integrative Systems, a 501 (c) (3) non-profit organization. No one at CytoSolve has been paid for developing the Standard. If and when the community agree on the Standard, only then will CytoSolve will receive any fee for using its technology for conducting bioavailability of enzymes.
- 21. A discussion took place on the safety of dried foods. Justin Feldman, Just Pure Foods, asked what the safety procedures involved in the Raw Food Certification are and whether the kill-step process is included in the safety certification.
- 22. Scott Jensen, Rhythm Superfoods, emphasized that the safety component of the Raw Food Certification is geared towards pathogen removal and providing a healthy and safe product for consumption.
- 23. Mazen Rabah, Go Raw, asked if the certification will be graded, e.g. 50%, 70% or 90% raw and if it is, will it cause confusion. Dr. Ayyadurai clarified that, being a bottoms-up standard, the stakeholder community can come up with a method which will not create confusion before the Standard draft is finalized.
- 24. A consensus emerged from the present stakeholders about the need to expand the Raw Food Certification that captures the notion of what is truly a "consciously" made food. Artemis Keszainn, New Earth Center, suggested conducting a survey to come up with a name for such Standard.
- 25. The meeting concluded with the summary of the following:
  - a. Clear and unanimous consensus on the definition of "Raw Food" being bounded by the three elements of safety, minimally processed, and bioavailability of enzymes, as defined in the Standard
  - b. A recognition that the "Raw Food" standard is actually a superset of defining food that is "truly healthy," "consciously made," "a gold standard."
  - c. A clear consensus that this standard can be used to label foods and products that are not just "raw" but comply to a rubric of products that are "truly healthy," "consciously made," "a gold standard."
  - d. Relative #3, there was also a consensus that we should perhaps label the standard as "Raw Food" but **something else**.
  - e. Relative #4, the community agreed that a homework assignment for all the attendees to come back with what to name that "something else"
  - f. Relative #5, there was also a consensus that whatever we name that "something else", raw would become a subset of that "something else." By way of example, if a symbol of a GOLD STAR is the label for that "something else," then the GOLD STAR adjacent

to the term "RAW" would be the label for "Raw Foods" that were processed with significantly less heat while compliant to higher safely standards.

- g. The following were outstanding items to be addressed in the final Standard:
  - i. For food that is processed at lower temperatures, the enhanced safety guidelines need to be enumerated.
  - ii. What should be the cut-off for the bioavailability criteria; currently it is 50%.
  - iii. What should be the name of imprimatur?

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3	Brad Gruno	Brad's Raw	bradgruno@gmail.com
4	Sequoia Cheney	Wonderfully Raw	sequoia@mycocoroons.com
5	Robert Freeland	Go Raw	rob@goraw.com
6	Scott Jensen	Rhythm Superfoods	sjensen@rhythmsuperfoods.com
7	Susan O'Brien	Hail Merry	suobrien@hailmerry.com
8	Sarah Palisi Chapin	Hail Merry	spalisichapin@hailmerry.com
9	Joshua McHugh	Living Intentions	Joshua@livingintentions.com
10	Alison Brushaber	Hail Merry	abrushaber@hailmerry.com
11	Steven Brown	Brad's Raw	steve@pergs.com
12	Ease Oldham	Easy Living Foods	ease@easylivingfoods.com
13	Justin Feldman	Just Pure Foods	justin@justpurefoods.com
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17	Mazen Rabah	Go Raw	maz@goraw.com
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21	Tricia Caldwell	Real and Worthful	tricia@realandworthful.com
22	Chris Herbert	Bearded Brothers	chris@beardedbros.com
23	Samantha Abrams	Emmy's Organics	samantha@emmysorganics.com
24	Sher Kopman	Raw Foodz	info@rawfoodz.com
25	Mark Kopman	Raw Foodz	info@rawfoodz.com
26	Chelsea Marshal	Laughing Giraffe	chelsea@laughinggiraffe.com
27	Herb Heller	Earth Circle Organics	herb@earthcircleorganics.com
28	Cindy Liggett	Brads Raw	cindy@bradsrawfoods.com
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31	Ian Gaffney	Emmy's Organics	ian@emmysorganics.com
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34	Kate Diamond	GoMacro	kate@gomacro.com
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36	Meg Heitlinger	Two Moms In The Raw	meg@twomomsintheraw.com
37	Ben McLean	Uncle Matt's Organic	ben@unclematts.com
38	Alex Howell	Uncle Matt's Organic	alex@unclematts.com
39	David Lafferty	Whole Foods	david.lafferty@wholefoods.com
40	J. D. Collins	Laughing Giraffe	jd@laughinggiraffe.com
40	J. D. COIIIIS	Laughing Onane	Jue laughingghaffe.com

#### **ENDNOTES**

## **ENDNOTE REFERENCES**

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