

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



JOINT OFFICE: Viale delle Terme di Caracalla 00100 ROME Tel: 39 06 57051 www.codexalimentarius.net Email: codex@fao.org Facsimile: 39 06 5705 4593

Agenda Item 3(d)

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES

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DRAFT CODEX STANDARD FOR CERTAIN CANNED CITRUS FRUITS

(AT STEP 6)

Comments have been received from Australia, Brazil, European Community, Malaysia,
Panama, Thailand, United States and Venezuela

AUSTRALIA

General Considerations on commodity standards for processed fruits and vegetables

Australia believes that the work of all Codex Committees should adhere to the key priority espoused in the Strategic Framework of Codex, namely to:

provide essential guidance for member countries through the continued development of international standards and guidelines relating to food safety and hygiene, nutrition, labelling and import/export inspection and certification systems and for the practical application of the concepts of equivalence and mutual recognition.

Australia considers that Codex commodity standards should provide essential product definitions and avoid wherever possible establishing quantitative limits for quality. Quality provisions are fundamentally driven by commercial and market requirements and Codex commodity standards should provide maximum flexibility, should be based on criteria of essentiality, and should not constitute a barrier to trade.

General Comments on the draft Codex Standard for Certain Canned Citrus Fruits

Given that there appeared to be little consensus on the need for this standard at the 22nd Session of the CCPFV, Australia does not believe that further development of this standard is warranted.

Furthermore, Australia considers that Codex commodity standards should only be developed where there is a proven risk to public health and safety and/or demonstrated or potential failures in trade. Australia therefore questions how standardising this commodity will support these aims and requests the Committee to reflect on whether the draft standard adequately meets the Criteria for the Establishment of Work Priorities in the Codex Procedural Manual.

In light of the Committee continuing to progress this draft standard Australia has the following specific considerations.

4. Food Additives

Australia considers that Section 4 should incorporate a general statement applying to those food additives permitted for use in accordance with GMP (Table III of General Standard for Food Additives (GSFA)), and that only food additives with numerical maximum levels are listed under the appropriate category in both the commodity standard and GSFA.

As such, a note to the following effect should form a preamble to this section:

“The products covered by the provisions of this Standard shall comply with those maximum levels for food additives as provided for in Tables 1-3 of the General Standard for Food Additives and include the following specific permissions:”

4.1 Canned Grapefruit

4.1.1 Acidity Regulators

Citric acid is the only acidity regulator permitted in the draft under Section 4.1.1.

Australian producers are permitted to use a variety of acidulants under domestic regulations, including citric acid. Australia believes that compounds that regulate acidity permitted under the GSFA should also be permitted for canned grapefruit.

Furthermore, Australia notes that citric acid is already permitted at GMP levels under Table 3 of the GSFA. Australia therefore believes that this subsection of the draft standard should be deleted as it would be covered by the specific reference to the GSFA under a generic additives provision (see comments under Section 4).

4.1.2 Firming Agents

Calcium chloride and calcium lactate are listed in the GSFA under Table 3 (Additives Permitted for Use in Food in General, Unless otherwise Specified, in Accordance with GMP).

No ADI is specified by JECFA for either calcium chloride or calcium lactate.

In consideration of the GSFA permissions and the JECFA evaluations, Australia suggests the permissions for calcium chloride and calcium lactate be amended to GMP. Furthermore, as both these firming agents are currently permitted at GMP levels under Table 3 of the GSFA, Australia believes that this subsection of the draft standard could be deleted as it would be covered by the specific reference to the GSFA under a generic additives provision (see comments under Section 4).

4.1.3 Flavours

The draft states “Natural and artificial flavouring are limited by GMP” for Canned Grapefruit. Australia believes that this clause is redundant and should be deleted.

4.2 Canned Mandarin Oranges

4.2.1 Acidity Regulators

Australian producers are permitted to use a variety of acidulants under domestic regulations. Permission for various compounds that regulate acidity is provided for in Tables 1-3 of the GSFA.

If no specific acidity regulators are incorporated into this standard this subsection should be deleted, as it should be covered by specific reference to the GSFA under a generic additives provision.

4.2.2 Anti-Clouding Agents

Methyl cellulose is listed in the GSFA under Table 3 (Additives Permitted for Use in Food in General, Unless otherwise Specified, in Accordance with GMP).

No ADI is specified by JECFA for methyl cellulose.

In consideration of the GSFA permission and the JECFA evaluation, Australia suggests that the permission for methyl cellulose be amended to GMP. Furthermore, as this anti-clouding agent is currently permitted at GMP levels under Table 3 of the GSFA, Australia believes that this subsection of the draft standard could be deleted as it would be covered by the specific reference to the GSFA under a generic additives provision (see comments under Section 4).

4.3 Canned Sweet Orange Varieties and Canned Pummelo

4.3.1 Acidity Regulators

Australian producers are permitted to use a variety of acidulants under domestic regulations. Permission for various compounds that regulate acidity is provided for in Tables 1 - 3 of the GSFA.

If no specific acidity regulators are incorporated into this standard this subsection should be deleted, as it should be covered by specific reference to the GSFA under a generic additives provision.

7.1.1 Minimum Fill

Australia sees no necessity for this clause provided product meets declared net weight conditions as outlined in the *General Standard for the Labelling of Prepackaged Food* (subclause 4.3).

BRAZIL

Item: 3.1.2.3. a e d: Brazil has no comments.

EUROPEAN COMMUNITY

2. DESCRIPTION

2.3 STYLES

2.3.2 Canned mandarin oranges may be packed as :

The EC proposes to clarify the definition of Whole Segment Style, to eliminate the distinction between Broken Segment and Pieces Style and to include the Twin Segments Style. The paragraph 2.3.2 should read as followed:

- (a) Whole Segment Style - consists of whole fruit segments in which the segment's length is at least 75% of the apparent length of the original segment. A segment which is split in one place only and is not prone to disintegrate shall be considered whole, but parts of a segment joined by a "thread" or by membrane only shall not be considered whole segments.
- (b) Twin Segment Style - consists of two or three segments joined together, which have not separated during processing.
- (c) Broken Segment Style - consists of fruit segments that do not satisfy Section 2.3.2.(a)

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 COMPOSITION

3.1.2. Packing Media

One of the objectives of the revision of the Codex standard is simplification. The adoption of general guidelines for the packing media of preserved fruits meets this aim and should be followed closely.

In this paragraph the list of the proposed packing media should be simplified.

The definitions for water, juice, juice and water and syrup should not be repeated for each citrus fruit.

There are some differences between the brix degree in the standard and in the guideline. Denomination of the liquid media syrup should be linked to the brix level.

3.1.2.2. Canned mandarins:

The values for MANDARINS in syrups and juice, as packing medium, should be replaced with the following:

SYRUP

SYRUP	Brix value
EXTRA LIGHT SYRUP	9-14
LIGHT SYRUP	14-17
SYRUP	17-20
HEAVY SYRUP	More than 20

JUICE

Natural mandarin juice: 9°-11° Brix.

Other juices: 11°-13° Brix.

Other non-citrus fruit juices (pear, peach, etc.) are also used on the market, so the table should not be limited exclusively to citrus fruit juices.

4. FOOD ADDITIVES

4.1.3 - Flavourings

The European Community and its Member States would like to propose the inclusion of a reference to the general principle of limiting the presence of biologically active substances as a result of addition of flavourings.

4.2 FOOD ADDITIVES FOR CANNED MANDARINS

Firming agents should **also** be included, as for GRAPEFRUIT. (See 4.1.2).

7. WEIGHTS AND MEASURES

7.1.4. b) Minimum drained weight for canned mandarins

- It is proposed to establish a minimum drained weight for all presentations of 56%.

8. LABELLING

8.2.2. Labelling for canned mandarins

In coherence with 2.3.2., TWIN segments should be included and PIECES should be excluded.

The possibility to use sweetened juices exists; this should be stated clearly on the label: "sweetened juice".

MALAYSIA

2. DESCRIPTION

2.1.1 (b)

Malaysia proposes to delete the sentence ~~‘(b) packed with water or other suitable liquid packing medium¹, nutritive sweetener¹, sugars as defined in the Codex Standard for Sugars (CX-STAN 212 – 1999, Amd. 1-2001), other nutritive sweeteners¹ such as honey, suitable spices or flavouring ingredients appropriate to the product and other authorized ingredients indicated in Section 3.3 and’~~ and replace with the sentence:

‘(b) packed with a suitable packing medium, suitable spices or flavouring ingredients appropriate to the products.’

2.3.2 (a) Malaysia proposes to retain the original text. The sentence will read as

follows:

‘Whole Segment Style – consists of fruit segments which are practically intact and also retain their original form but may be split just slightly.’

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1.1 Basic Ingredients

Malaysia is of the view that the word *‘Canned’* should be deleted:

- i) as reference has already been made in the same sentence and this proposal is consistent with other Codex Standards.
- ii) to make sure use the fresh grapefruit and pummelo and not the repacked the grapefruit and pummelo.

3.1.2.1 (b) and (c)

Malaysia proposes to add the word *‘s’* in the sentence *‘fruit juice’*. The sentence is to read as follows:

- (b) Juice – in which grapefruit juice, pummelo juice, or any other *fruit juices* is the sole liquid packing medium and to which no water has been added directly or indirectly.
- (c) Juice and Water – in which grapefruit juice, pummelo juice or any other *fruit juices* and water are combined as a liquid packing medium¹ with not less than 50% juice.

3.1.2.1 (c)

Malaysia proposes to delete the word ~~‘with not less than’~~ and replace with the word

‘with more than’. The sentence should read as follow:

‘(c) Juice and Water – in which grapefruit juice, pummelo juice or any other fruit juices and water are combined as a liquid packing medium with more than 50% juice’.

3.1.2.1 (d)

Malaysia proposes to delete the word *‘nutritive sweetener’* from the list of Optional Ingredients until CCPFV has agreed on the definition of the term *‘nutritive sweeteners’* (refer to CX/PFV 04/22/3 – General Considerations on Codex Standards for Processed Fruits and Vegetables). This is in accordance with the decision of the Committee when revising the Codex Standard for Canned Applesauce, that the term *‘sugars’* or *‘nutritive sweeteners’* appearing in the Standard should be replaced by *‘sugars as defined in the Codex Alimentarius and/or other carbohydrate sweeteners such as honey’*. Malaysia proposes to replace with the word *‘sugars as defined in the Codex Standard for Sugars (CX-STAN 212 – 1999, Amd. 1-2001)’*. The sentence should read as follow:

‘(d) Syrup – in which water, juice, or juice and water is combined with sugars as defined in the Codex Standard for Sugars (CX-STAN 212 – 1999, Amd 1- 2001).’

Malaysia notes that there are typographical errors/repetition under the columns for *‘Liquid Media’* and *‘Brix Measurement’*. Malaysia proposes to delete the following rows in the table.

Malaysia proposes to add the word '*(singly or in combination)*' under the columns for '*Liquid Media*' in the table.

Liquid Media	Brix Measurement
Slightly sweetened syrup	not less than 12 ⁰ Brix but less than 16 ⁰ .
Slightly sweetened grapefruit juice, pummelo juice or any other citrus juice (name of fruit) juice (s)) <i>(singly or in combination)</i>	Same as above
Slightly sweetened grapefruit juice, pummelo juice or any other citrus juice (name of fruit) juice (s) - delete the sentence	Same as above Delete the sentence
Light syrup	Not less than 16 ⁰ Brix but less than 18 ⁰ Brix
Lightly sweetened grapefruit juice, pummelo juice or any other citrus juice <i>(name of fruit) juice (s) (singly or in combination)</i>	Same as above
Lightly sweetened grapefruit juice, pummelo juice or any other citrus juice (name of fruit) juice(s) <i>(singly or in combination)</i> and water	Same as above
Heavy syrup	Not less than 18 ⁰ Brix
Heavily sweetened grapefruit juice, pummelo or any other citrus juice (name of fruit) juice(s) <i>(singly or in combination)</i>	Same as above
Heavily sweetened grapefruit juice, pummelo juice or any other citrus (name of fruit) juice(s) <i>(singly or in combination)</i> and water	Same as above

3.1.2.2 and 3.1.2.3

Malaysia proposes the sentence in the paragraph 3.1.2.2 and 3.1.2.3 to put in the paragraph 3.1.2.1. The paragraph should read as follow:

'3.1.2.1 Grapefruit, canned pummelo, mandarin oranges and sweet orange varieties may be pack in any one of the following:'

PANAMA

In general terms, we support at great length both the general and technical content of the three drafts Codex standards for processed tomato concentrates, preserved tomatoes and certain canned citrus fruits.

However, we would like to express our concern regarding the emphasis given to the color types included in Section 2.2 of the Proposed Draft Codex Standard for Certain Canned Citrus Fruits, taking into account that certain citrus fruits, such as oranges, may present different colors depending on the region of production/growth, which could impact countries, such as ours, in terms of products that could not match the color characteristics cited in the document.

1. [In the Spanish version of the document,] the letter "a" is missing on the third line of item 1. SCOPE. This preposition should be added so that the text will read as follows "...aplicará a los productos cuando se ..."
2. [In the Spanish version of the document,] the wording used in the product definition should be standardized (i.e., use "al" or "el") because "al" is used in Section 2.1.1 of this proposed draft ("se entiende por frutos cítricos en conserva **al** producto"), while "el" is the article used in previous proposed drafts.
3. In Section 2.4.1, item (a) (iv), a reference is made to Section 3.4.6. This section number is wrong and it should be changed to 3.2.5.
4. [In the Spanish version of the document,] in Section 3.1.3, the article "la" should be changed to "el" to refer to "pomelo". The final wording should be as follows "(Para **el** pomelo en conserva únicamente)."
5. In Section 3.2.7 a reference is made to section 3.4 which does not exist in this document. Therefore, there is a numbering error, or the reference to the document in question was omitted and should be included.
6. [In the Spanish version of the document,] it would be advisable that each time that a reference is made to the Good Manufacturing Practices or GMP [BPF, in Spanish] the equivalent abbreviation of BPM be written too (Buenas Prácticas de Fabricación, "BPF" ⇔ Buenas Prácticas de Manufactura, "BPM".) For example, see the following:
 - Last column (Maximum Level) of table 4.1.1 (Acidity Regulators)
 - First line, Section 4.1.3 (Flavors)

THAILAND**2.2.3 PALE YELLOW TO PALE GREEN**

The colour type of the product should be changed to “pale yellow” to reflect the exact colour of pummelo’s flesh. We therefore propose that section 2.2.3 be amended to read as follows:

“Pale yellow – produced from pale yellow fleshed pummelo.”

2.3.1 Subsection (C)

In addition to “Sections or Segments” and “broken sections or Broken Segments” styles, canned pummelo may also be packed as “Pieces Style”. We therefore propose to add a new subsection to read as follows:

“(c) Piece style – consists of portions of segments that are large enough to remain on a screen having 8 mm square openings formed by a wire of 2 mm diameter.”

3.1.2 PACKING MEDIA

Classification of packing media defined in Sections 3.1.2.1 – 3.1.2.3 could lead to confusion regarding the terms to be used to describe composition and sugar concentration of the packing media. We are of the opinion that Sections 3.1.2.1 – 3.1.2.3 can be deleted as reference has already been made to “Codex Guidelines for Packing Media for Canned Fruits” in section 3.1.2.

3.2.3 Texture, Subsection (a)

The word “reasonably” should be inserted before “firm” to reflect the texture of pummelo after processing.

3.2.7 Classification of “Defectives”

We note that there are editorial errors in the text. The sentence should read as follows:

“For canned grapefruit, ~~grapefruit~~, canned mandarin oranges, canned sweet orange varieties and canned pummelo – A container that fails to meet one more of the applicable quality requirements, as set out in Section ~~3-4~~ 3.2 (except.....”

7.1.4 Minimum Drained, Subsection (a)

We propose to change the drained weight from “50%” to “40%” to make it more practical for pummelo.

UNITED STATES**Section 4. Food Additives**

Statements and tables found in sections 4.1.1, 4.1.2, 4.2.1, 4.2.2 and 4.3.1 should be replaced with the following statement:

“Acidity regulators and firming agents used in accordance with Table 1 and 2 of the Codex GSF A in food category 04.1.2.4 (Canned or bottled (pasteurized) fruit), or listed in Table 3 of the GSF A are acceptable for use in foods conforming to this standard.”

VENEZUELA**2. DESCRIPTION****2.1 DEFINITION OF THE PRODUCT**

2.1.1 Canned citrus fruit is the product:

- (a) prepared from washed, sound and mature ripe grapefruit, mandarin oranges, **lemons**, sweet orange varieties, or pummelo, **without apparent signs of deterioration**, conforming to the characteristics of the fruit of:

(v) Citrus lemon

- (b) packed with water or other suitable liquid packing medium, natural nutritive sweeteners (sugars, honey, hydrogenated glucose syrup) and/or artificial sweeteners (potassium acesulphame, sodium and potassium cyclamate, sodium or calcium saccharine, or Sucralose), suitable spices or flavoring ingredients appropriate to the product, and other authorized ingredients

(c) processed by heat, in an appropriate manner, before or after being hermetically sealed in a container, so as to prevent spoilage. Before processing, the fruit shall **be healthy, without signs of deterioration**, have been properly washed and peeled and the membrane, seeds and core and fiber strands originating from albedo or core, shall have been substantially removed from the sections

2.3 STYLES

2.3.1 Canned grapefruit, sweet orange varieties, pummelo, **or lemons** may be packed as either:

2.3.3 Other Styles (Canned grapefruit, mandarin oranges, sweet orange varieties, pummelos, **and lemons**)

2.4.2.1 CLASSIFICATION OF DEFECTIVE **PRODUCTS**:

Any sample unit or **product** that does not meet

2.4.2.2 LOT ACCEPTANCE

...should be considered as meeting the criteria for a uniform size designation when the number of defective **products**,...

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 COMPOSITION

3.1.2. PACKING MEDIA

3.1.2.1 Canned grapefruit, pummelo **and lemons** may be packed in any one of the following:

(a) **WATER: in which water is the only packing medium.**

(d) **FRUIT JUICE MIXTURE: in which juices of two or more fruits are combined to form the packing medium.**

(e) **WITH SUGAR (Syrup):** in which water, juice, or juice and water is **combined with one or more natural nutritive sweeteners (sugars, honey, hydrogenated glucose syrup) and/or artificial sweeteners (potassium acesulphame, sodium and potassium cyclamate, sodium or calcium saccharine, or Sucralose)** and are classified on the basis of cut-out strength as specified below:

LIQUID PACKING MEDIUM	DEGREES BRIX
- Slightly sweetened syrup	Not less than 10° Brix
- Slightly sweetened pummelo, grapefruit or lemon juice or any other citrus juice	Not less than 10° Brix
- Light syrup	Not less than 15° Brix
- Lightly sweetened pummelo, grapefruit or lemon juice or any other citrus juice	Not less than 15° Brix
- Lightly sweetened pummelo, grapefruit or lemon juice or any other citrus juice and water	Not less than 15° Brix
- Heavy syrup	Not less than 25° Brix
- Heavily sweetened pummelo, grapefruit or lemon juice or any other citrus juice	Not less than 25° Brix
- Very heavy syrup	Not less than 40° Brix

3.1.2.2 Canned mandarin oranges may be packed in any one of the following:

(d) With **natural** nutritive sweeteners.....

3.1.2.3 Canned sweet orange varieties may be packed in any one of the following:

(a) **WATER: in which water is the only packing medium.**

(d) **FRUIT JUICE MIXTURE: in which juices of two or more fruits are combined to form the packing medium.**

(e) **SYRUP:** in which water, “fruit/orange” juice, or “fruit/orange” juice and water **combined with one or more natural nutritive sweeteners (sugars, honey, hydrogenated glucose syrup) and/or artificial sweeteners (potassium acesulphame, sodium and potassium cyclamate, sodium or calcium saccharine, or Sucralose)**, as a liquid packing medium and are classified on the basis of cut strength as specified below:

LIQUID PACKING MEDIUM	DEGREES BRIX
- Slightly sweetened syrup	Not less than 10° Brix
- Slightly sweetened orange juice	Not less than 10° Brix
- Slightly sweetened orange juice and water	Not less than 10° Brix
- Light syrup	Not less than 15° Brix
- Lightly sweetened orange juice	Not less than 15°Brix
- Lightly sweetened orange juice and water	Not less than 15°Brix
- Heavy syrup	Not less than 25° Brix
- Heavily sweetened orange juice	Not less than 25° Brix
- Very heavy syrup	Not less than 40° Brix

3.1.3 OPTIONAL INGREDIENTS (canned grapefruit only)

- Natural essential fruit oils
- Spice oils
- Spices

3.2 QUALITY CRITERIA

Canned citrus fruit shall have normal flavor, odor, and color and shall possess texture characteristic of the product **and shall come from healthy fruit without signs of deterioration and with an adequate ripeness.**

3.2.7 CLASSIFICATION OF DEFECTIVE PRODUCTS

For canned grapefruit, grapefruit, canned mandarin oranges, canned sweet orange varieties, **lemons**, and canned pummelo – The **products** that fail to meet ...

4. FOOD ADDITIVES

4.1 FOR CANNED GRAPEFRUIT

4.1.1 ACIDITY REGULATORS

N° INS	NAME OF FOOD ADDITIVE	ADI (mg/Kg)
330	Citric Acids and its Sodium, Potassium and Calcium Salts	NS

4.1.1 AGENTES ENDURECEDORES

N° INS	NAME OF FOOD ADDITIVE	ADI (mg/Kg)
509	Calcium Chloride	NA

NA Not Assigned. There are a number of reasons for not assigning an ADI, from a lack of information to data on adverse effects that require that a food additive or food drug not be used at all.

NS Not Specified. A term applicable to food substances with very low toxicity, for which, based on available data (chemical, biochemical, toxicological and other data), daily ingestion as a result of their use at levels necessary to reach the desired effect and in their accepted history do not present a health risk in the opinion of JECFA. For this and other reasons listed in individual evaluations, the establishment of an acceptable daily intake expressed in numeric form is not considered necessary. An additive that fulfills these criteria should be used within the limits of good manufacturing practices, that is, it should be technologically effective and used at the lowest necessary level to accomplish the effect; it should not lead to inferior quality of the food or its alteration, and should not create a nutritional imbalance.

5. CONTAMINANTS

5.2 OTHER CONTAMINANTS

The products governed by the provisions of this standard shall comply with those maximum levels for contaminants established by the Codex Alimentarius Commission for these products.

IN VENEZUELA, THE FOLLOWING CONTAMINANTS ARE PERMITTED:

CONTAMINANT	LIM (MAX) (mg/kg)
COPPER	5.0
LEAD	1.0
ARSÉNIC	0.2
TIN	125.0
ZINC	5.0
MERCURY	0.05

7. WEIGHTS AND MEASURES

7.1. CONTAINER FILL

7.1.4 MINIMUM DRAINED WEIGHT

(a) For canned grapefruit, canned sweet orange varieties, canned pummelo, and **lemons** - The drained weight of the product shall be not less than 50%, calculated on the basis of the weight of distilled water at 20°C which the sealed container will hold when completely filled.

8. LABELING

8.2 NAME OF THE PRODUCT

The name of the product shall be “grapefruit”, “mandarin oranges”, “pummelo”, “oranges” or “**lemons**”, as defined in Section 2.1.1.

8.2.4 For canned lemons

(a) The style, as appropriate, shall be included as a part of the name or close to the name, as follows:

(i) Whole fruit

(ii) Slices: lemons cut transversally with a uniform thickness.

(b) The packing medium as appropriate

9. METHODS OF ANALYSIS AND SAMPLING

Provision	Level	Method	Principle
container fill (<u>volume occupied</u>). expressed in % <u>vol.</u>	minimum 90 %	determination of volume occupied by the product.	weight
<u>vacuum. (expressed in mmhg)</u>	minimum 150	determination of vacuum	
drained weight. expressed %	minimum 60%	determination of drained weight.	weight
mold count	mold hyphas max. 20% of positive fields	determination of mold hyphas “howard method”	
packing medium, expressed in degrees brix	very light > 10 light > 15 heavy >25 very heavy >40	determination of soluble solids by refractometry	refractometry