

1. METHODOLOGY

The survey questions were developed during a Te Kai Manawa project team workshop and then extensively trialed by selected Te Kai Manawa Ora team members. This trial included actively taking the survey to marae to test along with asking the opinion of kaumātua known to team members. Following the trial, the survey questions were reviewed and improved to ensure the survey would gather the information needed.

The survey was delivered by project team members in person to ngā ringawera (refer Appendix 1 for glossary of Māori definitions) who work in the wharekai and not left or sent to the marae for people to complete. It was felt that it was important for the team member to talk through the questions with ngā ringawera to ensure a high quality outcome from the survey. This approach was also important to help build links between the project team member and the people of the marae. The aim was to source information from kaumātua and ngā ringawera; however, it was not always possible to get all these people together for the interview.

Sixteen interviews were conducted covering 18 marae. There are more marae than interviews due to the fact the interviewers sometimes brought a number of people together for the interviews from different marae.

- | | |
|------------------------------------|------------------------------------|
| • Taitokerau (Northland) | 3 interviews (4 marae represented) |
| • Tāmaki Makaurau (Auckland) | 2 interviews |
| • Tainui (Waikato) | 3 interviews (2 marae represented) |
| • Tairāwhiti (Gisborne/East Coast) | 1 interview |
| • Taihauāuru (Taranaki/Whanganui) | 3 interviews (5 marae represented) |
| • Heretaunga (Hawkes' Bay) | 2 interviews |
| • Waipounamu (Otago/Southland) | 2 interviews |

2. SURVEY FINDINGS

PĀRONGO 1: MARAE ACTIVITIES

Q 1: Marae used as Civil Defence post

- 3 marae out of 18 surveyed (15%) of marae are used as Civil Defence post
- 15 out of 18 marae surveyed (85%) of marae are not used for Civil Defence purposes
- Of those marae not used by Civil Defence, one stated that the schools nearby were preferred by Civil Defence because of better facilities and access to clean drinking water.

Q 2: Hui hosted on marae over last 12 months

FIGURE 1

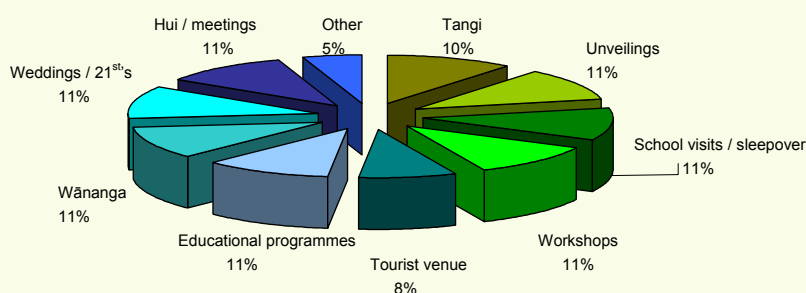


Fig. 1: Identifies the typical hui held on the 18 marae surveyed. Of interest are the number of education and learning hui that regularly utilise marae facilities

Q 3: Average number of Hui per month

On average 5.87 hui are held on marae per month, therefore every week there is at least one hui of some type taking place on the marae

Q 4: From the above list of events:

The least number of people catered for at any one hui was on average 6.38 people

The largest number of people catered for on marae averages 1098.

Q 5: Is kai often given as a koha?

17 of the 18 marae surveyed (92%) of marae receive food as koha and ranges from locally grown foods in season, or home-kill donated by a local farmer. Manuhiri and whānau arrive at hui with all types of food items including:

Vegetables; cabbages, corn, silver beet, tomatoes, peruperu, cauliflowers, pumpkin, kūmara, watermelon

Seafood/; Pipi, tuatua, kutai, oysters, fish, kina, crayfish

Meat; beef, mutton, chicken, wild and domestic pig

Packaged goods: bread, tea, coffee, baking products, flour and spices.

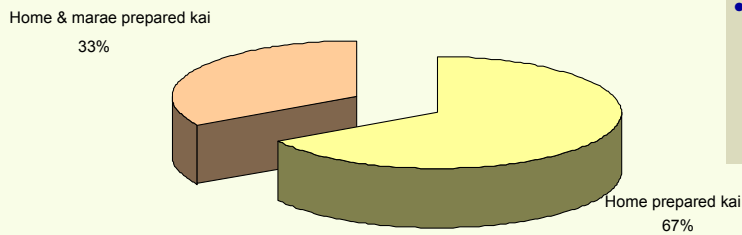
What guidelines/practices do marae have to ensure food is safe?

Responses ranged from

- No guidelines
- Visual check of food as it arrives and before preparation
- Kaimoana and vegetables eaten fresh
- Use meat workers to handle meat
- The head cook ensures all food is cleaned and stored correctly when it arrives
- Manaakitanga is what its all about – that's why our kai's safe
- There is an element of trust regarding cultural safety.

Q 6: Is there a kōhanga reo on the marae?

FIGURE 2



Is food prepared on site or at home?

- 9 marae (67%) out of 13 marae with a kōhanga reo require tamariki to bring their own kai from home
- A third of those marae surveyed or 4 marae out of 13 (33%) had both home and on-site kai preparation.

Fig. 2: Identifies 13 out of 18 marae (69%) of marae have a kōhanga reo operating and of the 13 marae that have a kōhanga, 9 marae (67%) require tamariki to bring their own kai from home

Q 7: Is the marae hired out to manuhiri?

16 marae of the 18 marae surveyed (92%) make their facilities available for hire with most requesting only a koha for the use

Does marae have a policy to maintain the sanctity of kai?

- 7 marae out of the 18 surveyed (42%) say that they have some formal guidelines
- Just over half those surveyed or 11 marae out of 18 (58%) did not have formal written guidelines
- Most relied on the respect of manuhiri and the locals
- Tikanga and kawa on the marae.

- Manaakitanga used as a guide to maintaining the sanctity of kai
- Both marae and manuhiri prepare and ensure the safety of the kai when marae is hired

Q 8: Do whānau / hapu sell food prepared in the marae kitchen?

10 marae of the 18 surveyed (54%) prepare food in the marae kitchen for sale to the public with all sales being part of fundraising ventures.

Q 9: Is the marae kitchen currently registered by the Council?

- 6 marae of the 18 surveyed (38%) are registered with the council under the Food Hygiene Regulations 1974 with the majority or 12 marae (62%) having no registration under the Regulations
- marae are generally registered with the Council as a commercial kitchen or for catering purposes.

Q 10: Does the marae have any future plans to sell food that has been prepared from the marae kitchen?

13 marae out of the 18 surveyed (69%) have no future plans to operate a commercial business.

PĀRONGO 2: SOURCES OF FOOD (NON COMMERCIAL WILD FOOD)

Q 11: Wild foods – collected or sourced (not commercial outlets)

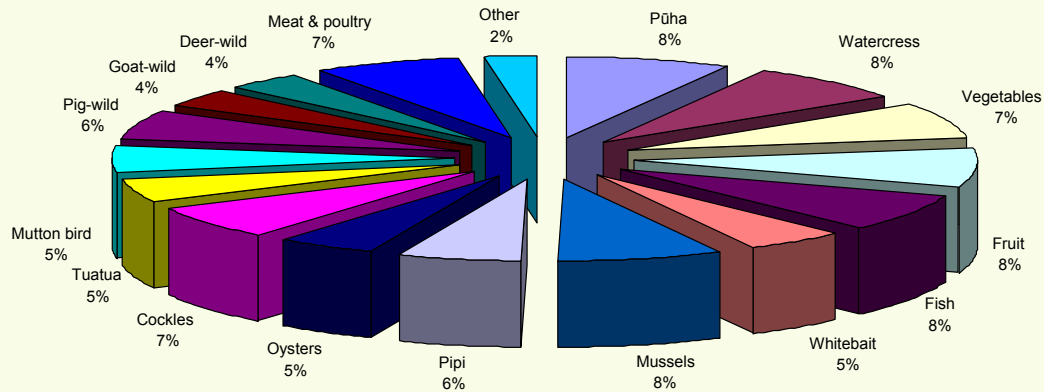


Fig. 1: Identifies the types and percentage of non-commercial wild foods sourced by the 18 marae in the survey sample

Foods listed under 'other' include:

- Eel
- Kina
- Kanga kōpiro
- Fermented duck
- Terotero
- Seaweed
- Toheroa
- Paua
- Crayfish.

Additional comments from those surveyed:

- Locals have experienced problems with weed spray contamination on watercress and pūha. A letter has been written to the local council.
- Have no control over the activities of local businesses and/or agencies e.g. regional council pesticide drops may have detrimental affects on our harvest sites (sometimes near the marae).

PĀRONGO 3: FOOD PREPARATION & STORAGE

Q 12: Traditional Foods Prepared on marae

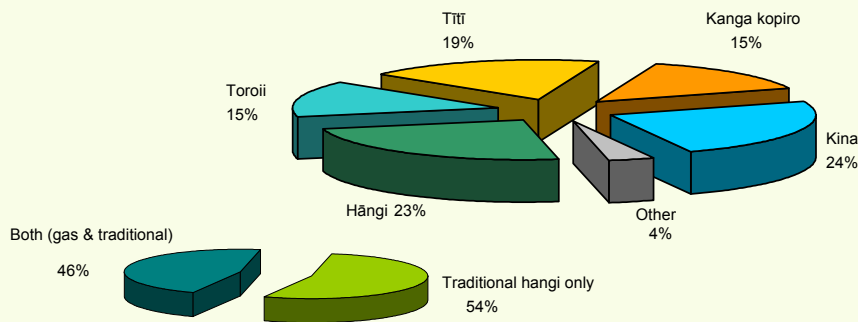


FIGURE 1

Fig. 1: Identifies the common types of traditional foods prepared and the frequency of preparation on the 18 marae in the survey

'Other' category of traditional foods includes:

- Boil ups – pork bones/ brisket bones with puha, watercress, cabbage or silver beet
- Regional delicacies
- No recipes were received from any of the participating marae.

Q 13: All other foods prepared on the 18 marae

FIGURE 2

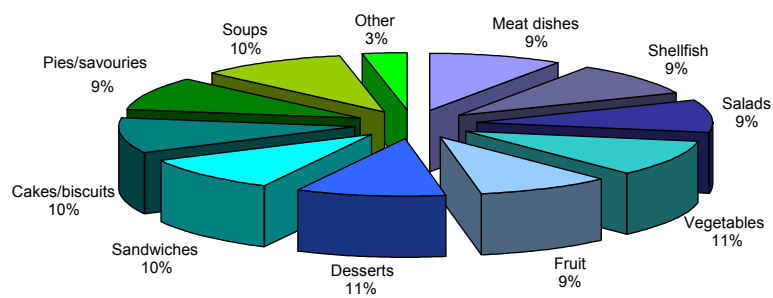


Fig. 2: All other food prepared on marae

Q 14: Does the marae have access to kaumātua advice in regards to traditional food?

All marae reported having access to kaumātua

Additional comments include:

- Most kaumātua have died with their knowledge but the local Māori community may have information
- Some whānau keep the information within their immediate whānau
- Marae has access to a hāngi consultant
- Marae has access to kaumātua but the communication channels can be confused at times and therefore key messages are tending to get lost
- Young people are disregarding advice of elders or not listening.

Q 15: What tikanga best-practices for safe kai does the marae support?

Note: 'other' category includes:

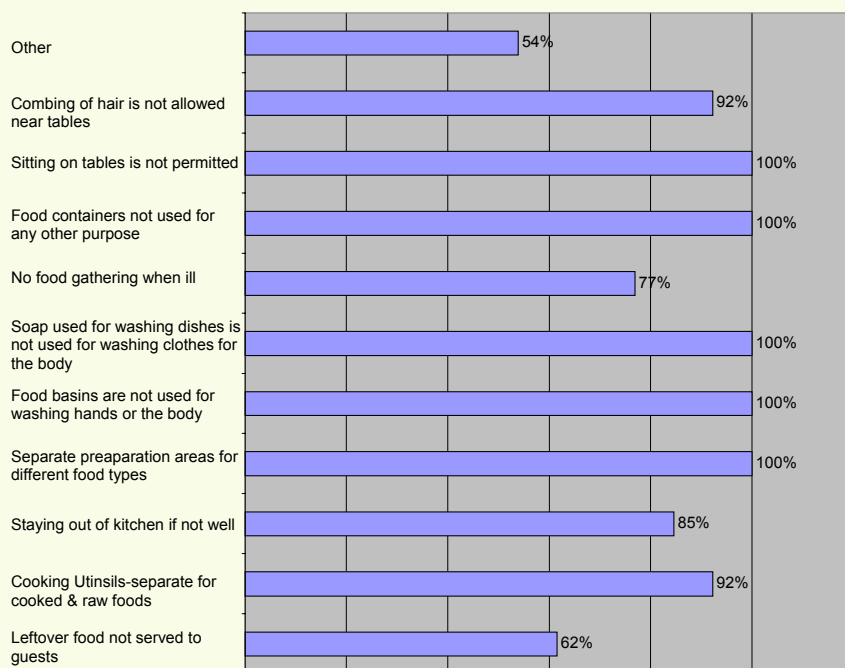


Fig. 3: Kai tikanga practiced on the 18 marae

FIGURE 3

- No sweeping/cleaning while the kai is on the tables
- Use colour co-ordinated cleaning equipment/containers
- Plates turned upside down when setting tables
- Knives/forks kept in own containers when washed
- The marae has standard practices, if manuhiri use the marae it becomes their responsibility
- Each person has specific role and tasks rotated as required
- Butchers bring own utensils/ gear
- No washing or laundry allowed in kitchen – strict kaumātua advice
- Wahine with their menstrual cycle, are not permitted in the kitchen, (this is tikanga, but today woman are so instrumental/ influential on the marae, who is going to tell them not to?)
- Some left-overs will be re-used e.g. reheat soups
- Raw meats stored and prepared in separate areas
- Gloves for handling food
- Separate laundry for kitchen tea towels and table clothes
- Have no control over what happens when hiring out the marae and visitors preparing the food.

Additional comments from survey:

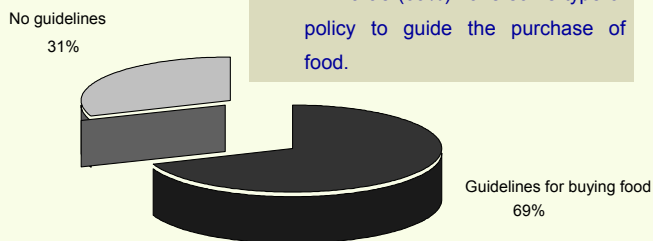
- Leftover food not served to guests - if there is leftover food, it is taken home by marae catering staff
- Cooking utensils separate for cooked and raw foods - (this is a common practice)
- Stay out of kitchen if not well - this includes food gathering
- Separate preparation areas for different food types
- Food basins are not used for washing hands or the body
- Soap used for washing dishes is not used for washing clothes or the body
- Food containers not used for any other purpose - all food containers are labeled.

Q 16: Do you have guidelines on buying safe food?

Additional comments from survey:

- Rely on the senses, sight and smell
- check use by date on packaged foods
- Have guidelines, but these are not written
- Just known by all who work in the kitchen
- There are occasions when food is purchased because it is really cheap (eg chickens pieces for 50c)

FIGURE 4



- 6 marae of the 18 surveyed have no form of guideline or policy when purchasing or acquiring food
- 12 marae (69%) have some type of policy to guide the purchase of food.

Fig. 4: Guidelines on purchasing kai for marae

If yes, please give examples:

- Local knowledge, only buy from reputable sources
- Always use the same food sources
- Buy from supermarkets/food wholesaler
- Approved and reputable suppliers only used
- Designated persons purchase groceries – they check labels and expiry dates
- Buy food in large quantities, what is available at the time
- Quality is important but so is the price
- Food is checked when purchasing
- Use mainly the supermarkets and local contacts
- Buy food in large quantities
- Buy what is available at the time.

Are there any guidelines which indicate when to gather kaimoana?

10 out of 18 marae surveyed (54%) have some type of guideline for collecting Kaimoana, many are not written policies but rather tikanga that the marae have always practiced.

FIGURE 5

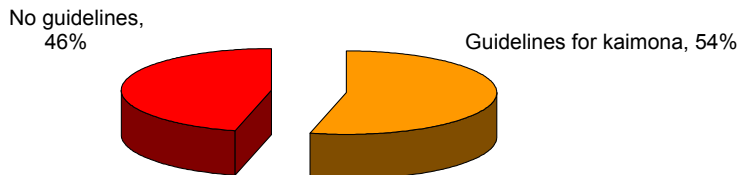


Fig. 5: Guidelines on gathering kaimoana

Comments from those that answered 'no' to this section are as follows:

- Rāhui
- Women who are in 'menstruating' do not gather kaimoana
- No shellfish after heavy rain fall
- Weather permitting and water safety rather than food safety
- Upon kaumātua/elders advice
- Questions asked where shellfish is collected from
- Shellfish only to be collection by permit holders in marae
- Rūnanga monitors kaimoana collection areas
- No guidelines – expect that the people who are gathering the kaimoana to know when and where not to gather
- Not an issue today, as marae can always source seafood from retailers or other parts of the country.

Any other guidelines which need to be adhered too when bringing/collecting wild food?

Additional comments from the surveyed marae:

- Signage for hydatids
- Stay in your own area when gathering kaimoana
- Follow direction from the farmer whose property you are on
- Making sure the water is running in the rivers and streams
- Be safe and bring what they can
- No, just grateful to receive whatever
- Inspection of kai, meat (home-kill) - Is usually sourced from nearby farmers who use local registered home-kill provider.
- Kaimoana/wild pork, it is usually left up to kitchen staff and elders advice
- Food received as koha
- Ensure the food is fresh and good quality
- The food is stored correctly, covered and in clean containers
- Wash hands after handling meat and poultry products
- Ensure the food is fresh and good quality
- No guidelines, expect that the people who are bringing this know how to prepare gather and handle the food safely.
- No guidelines, there is an element of trust that the food gatherer knows where to get safe food.

Q 17: Storage

Types of storage – chilled / frozen & dry goods.

All 18 marae surveyed confirmed that they have all three types of storage facilities.

Is food bought especially for functions/events or held all the time?

Comments from the surveyed marae:

- Dry stock is held all the time
- Always buy perishable ingredients fresh
- Small quantities held for start then expect whanau/ hapu to provide food for hui
- Yes, food is left on the marae after a hui
- The food is purchased for each event and only a small quantity of grocery items are kept in dry storage
- Most of the food is purchased for that particular event/function or hui
- The chilled items are placed into the large walk in chiller and other items milk and dairy products are stored in the fridges under the benches
- There is a separate dry good storage area for grocery items
- Do not store a lot of food in chillers or freezers for any length of time
- All food is covered in the chillers and placed onto clean containers
- Food is bought specifically for each functions/events
- Perishable food is bought when needed
- Non-perishables are stored e.g. frozen and dried foods
- Bought specifically for the occasion. Small amounts of herbs and condiments held on site.

Q 18: Do you defrost/thaw food?

i.e. **benchtop, fridges, microwave**

- On bench, covered
- Big pieces of meat in the chiller
- If in a hurry immerse in water
- Yes, bench-top
- Bench-top and plastic tubs
- Fridge, chiller, in the sink with running water
- No freezer therefore chiller used for defrosting
- In the chiller, or on the bench depending when the food is needed. Not often
- Mostly buy fresh foods not frozen
- Defrost in the chiller
- Combination of all methods of defrosting, depends on circumstances
- On bench
- No specific methods, often just left to thaw on bench-tops.

Q 19: How far ahead of an event is food prepared?

- Depends on the occasion, availability of kaimahi and the type of food being prepared, food is often prepared in advance
- Same day or day before
- Food is mainly consumed fresh
- Fresh food is made up daily
- Depends on function
- Generally on the day or the previous day.

If foods are prepared in advance, which ones?

- Potatoes are peeled and left to sit in water
- Cold meats
- Meat cooked beforehand for reheating
- If given notice food is prepared day before (meat is hung in chiller)
- Sandwiches, salads, eggs, lettuce, ham and other foods that don't spoil easily
- The food is purchased the day before and prepared that day then cooked either on the day or the day before
- Hangi food is cooked on the day, but some of the vegetable prep is done the day before
- Desserts can be done the day before
- Soup is made the day before
- Some food is prepared the day before e.g. roasts for cold meat, soups, vegetable preparation
- Depends on what is being prepared, usually on the day some food is prepared the day before

Q 20: Cooking - Types of food cooked

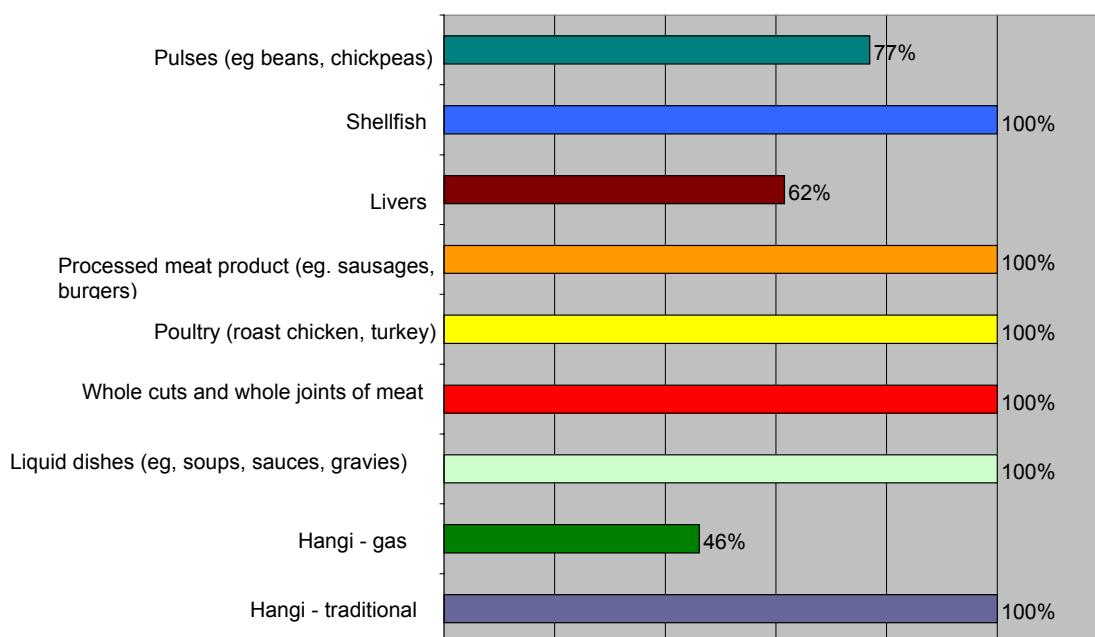


FIGURE 6

All foods listed in the survey are cooked on the marae

Fig. 6: Types of food cooked on the 18 marae

Q 21: Do you cool-down hot food?

All marae surveyed cool down hot food with some of the more popular ways including:

- On the bench or chiller – (depth of container varies)
- Chiller and deep containers
- Fridge, shallow containers
- Put in chiller
- Food is cooled on the bench then placed into the chiller for storage or until required
- The food is taken from the large pots and placed into shallow containers to be placed into the chiller
- Put on the bench and covered with cloth over top
- Leave until completely cool
- Cool soups in pot that was cooked in
- On bench/fridge/deep containers/shallow containers
- On the bench covered with cloth.

Q 22: Do you reheat food?

All marae surveyed reheat food with the most common methods noted below:

- Stove top
- Microwave
- Gas rings
- Have used a pie warmer in the past
- Depends on numbers attending hui
- Warmer “oven”
- Stove top/oven/ gas cookers
- Cooked/ fried, (not warmed)
- Stove top/oven/bain marie/pie warmer
- Depends on type of food
- Use stove, bain marie and occasional use of pie warmers
- Stove top, oven.

Q 23: Do you keep hot food on display?

If yes, how is food kept hot?

FIGURE 7

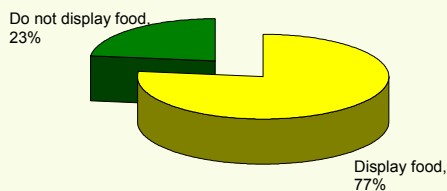


Fig. 7: Hot food displayed

14 marae surveyed (77%) display food in some way.

FIGURE 8

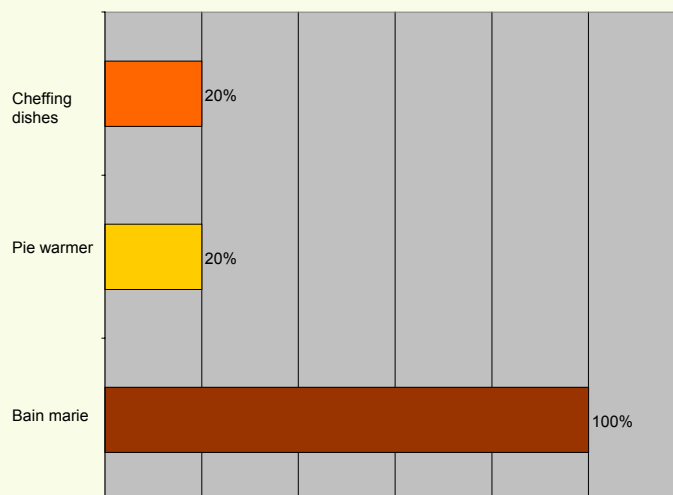


Fig. 8: How food is kept hot

Of the 77% of marae surveyed that display food:

- All 14 use a bain marie
- 3 have access to a pie warmer, and
- 3 use cheffing dishes.

Q 24: Are perishable foods (eg, salads, cold meat, sandwiches and cream desserts) displayed?

FIGURE 9

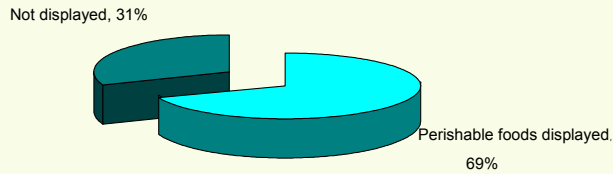


Fig. 9: Foods displayed at surveyed marae

- 69% or 12 of the 18 marae, display food that is perishable
- For those marae that do not display perishable food most indicated that kai was eaten within 10 - 15 minutes of being served up.

In all instances where food is displayed at room temperature, there are no written guidelines or policies on the length of time or method of displaying food.

How is it displayed? Refrigerated, on ice, room temperature

The following methods listed below are employed by marae to display perishable food:

- Room temperature
- Cover food with glad wrap
- Refrigerated display unit
- On ice and room temperature
- Room temperature but no guidelines on how long to keep food at room temperature.

Q 25: Do you transport/deliver food? (eg, food taken from one marae to another)

FIGURE 10

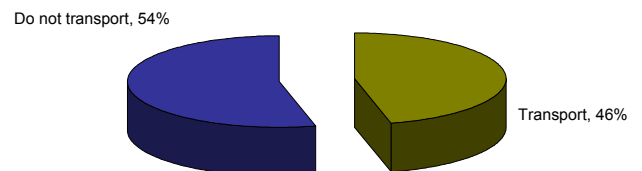


Fig. 10 Transport kai

8 marae or 46% of the survey transport kai to other marae and /or hui.

Where to, how?

Comments from those that transport kai:

- Sometimes but very rarely
- Use vans/cars and it is taken as soon as it is ready
- From one marae to another and within close proximity of each other
- When there is a large event at another marae
- In covered containers, hangi for fundraising
- Use tin foil and baskets
- Covering used on cooked hangi and other kai
- Collected by whanau and transported by car.

How do you keep the temperature safe? Hot or cold during transport

Some comments and observations from the survey include:

- No specific temperature controls / testing was noted by any of the marae surveyed
- There are no policies in many cases
- Aware that some shellfish is gathered around Bay of Plenty through whanau contacts and brought over to Gisborne in sacks in the boot of car
- Glad wrap
- Tin foil
- Chilly Bins

Q 26: Following comments noted by the interviewer at the time the marae was surveyed:

- Observed one kitchen in good condition and was clean, big enough for the scale of catering and complied with the first schedule
- No, did not view the facilities at this marae
- Kitchen is attached to dining room for ease of serving
- Kitchen is clean and surfaces are painted and adequate for food preparation
- Stainless steel benches for food preparation with plastic chopping boards
- Ready to eat food preparation is undertaken in the kitchen and dry and chilled goods are stored in a separate storeroom
- Outside chiller has gauge but fridges/ freezer inside are not temperature controlled
- No hairs nets/ hats, sometimes use of gloves, aprons
- No first aid kit
- No hand wash basin
- No food temperature control except visual
- Waste disposal the responsibility of the whanau
- Food to pigs and refuge to council supply
- Meat and vegetable preparation and cooking is done in a separate kāuta which is clean but roof and wall surfaces are unpainted or sealed
- Roof is exposed
- Chiller has wooden slats that cannot be removed for cleaning
- Soak pit is alongside the water bore
- Spouting has grass growth
- Plumbing and toilet facilities are part of the marae complex and appear satisfactory
- Appliances are gas, were clean and are of reasonable standard
- Maintenance on a needs basis
- Manual dish washing
- Good overall. New fridge, freezer, chiller to be installed in new kitchen and new hot water cylinder, stainless steel preparation surfaces and dishwasher
- The kitchen is purpose built and is new, with large walk in chillers and all benches are stainless steel. There are small fridges under the benches to store chilled food in
- The stoves are gas, the there are 3 large commercial ovens
- A separate preparation area at the back of the kitchen
- The facilities in the kitchen a very good and comply with the Food Hygiene Regulations
- The kitchen has council registration
- The kitchen is a large open plan kitchen with a number of stainless steel benches and a large number of work areas all with sinks and hot water
- 2 commercial dish washers are in place
- 3 hand washing facilities in the kitchen area. All have liquid soap and paper towels
- Large sinks are used to wash large items
- There is a large serve over area between the kitchen and the dining room
- The kitchen is in good order and clean at the time of my visit.

Q 27: Are there any plans to upgrade the kitchen?

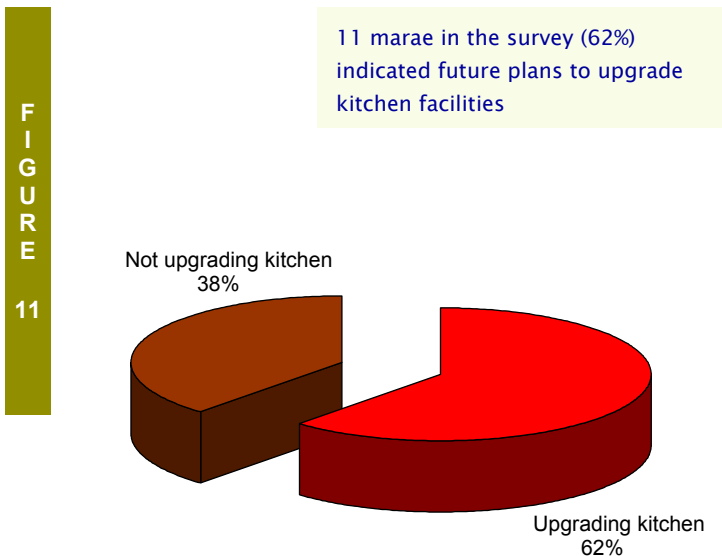


Fig. 11: Future plans to upgrade marae kitchen facilities

If yes, when and how?

Comments from those surveyed:

- Kitchen /dinning room renovated 2 years ago
- One kitchen is 18 years old but is still in very good condition
- Upgrade cook house, renovation but no date set
- Marae committee have signalled that a new wharekai needs to be built
- Timeframe next 3 years
- Depends on funding
- New kitchen being built
- Some changes e.g. additional wash hand basin, pot sink by cookers
- No time frame for doing as requires additional funding to complete
- As above new floor within next 6 months and new chiller
- Ongoing when finances can afford.

Q 28: Does the marae have any written policies currently in place? e.g. nutrition or food hygiene

If yes what are the policies?

- Need to revisit, has been in place for some time
- Smoke-free policy for marae
- No nutrition and food safety policy for marae but have marae tikanga
- Workshops required to update
- Non written rules in place, but tikanga
- In the kitchen there are hand washing posters and reminders on how to avoid cross contamination
- No written policies but the marae had been moving towards providing more 'healthy' foods.

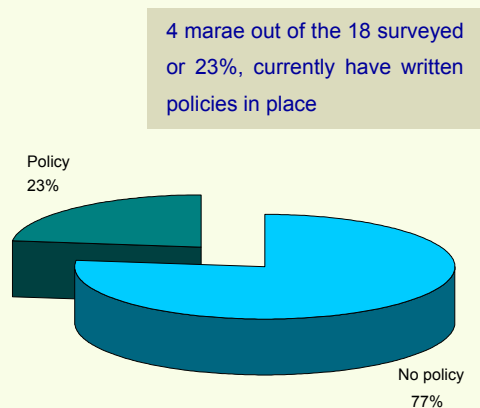


Fig. 12: Marae policy for nutrition and hygiene

FIGURE 12

PĀRONGO 4: MARAE WATER SUPPLY

Q 29: What is the source of water used on the marae?

FIGURE 1

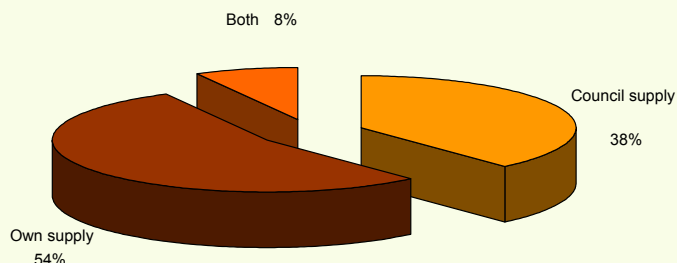


Fig. 1: Source of water supply on marae

Survey Findings:

- 10 marae (54%) have own source of water
- Only 2 of the 18 marae (8%) have both council and own supply
- 6 marae (38%) are on council supplied water only
- One interviewee mentioned that the marae had its own supply (roof) but will be connected to council supply by the end of this year.

Indicate the source of water supply

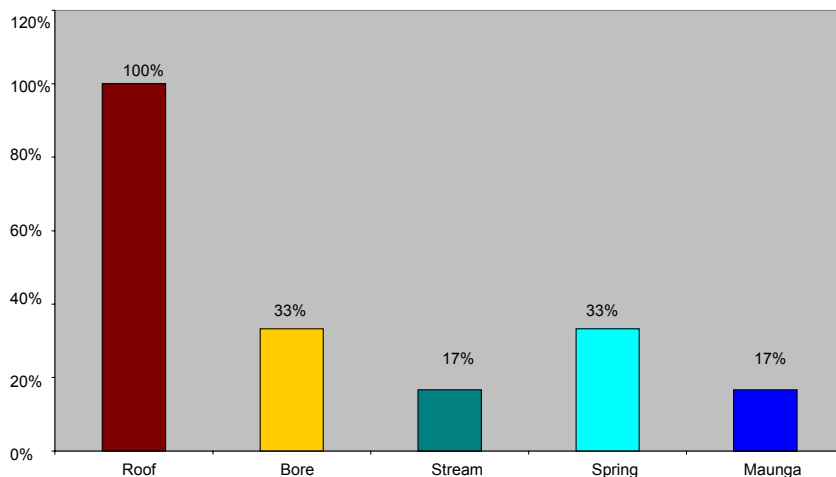


FIGURE 2

Fig. 2: Source of water on marae with 'own water supply'

Findings from the 10 marae in survey with 'own water supply'

- All 10 marae have at least two sources of water supply
- All have rain water (roof) and an alternative source supplied by bore (3 marae), stream (2 marae), maunga (2 marae) or spring (3 marae) 1 marae has been actively involved with the Ministry of Health - 'Safe Drinking-water Assistance Programme'.

Q 30: If marae has 'own water supply' is there any treatment of the water?

FIGURE 3

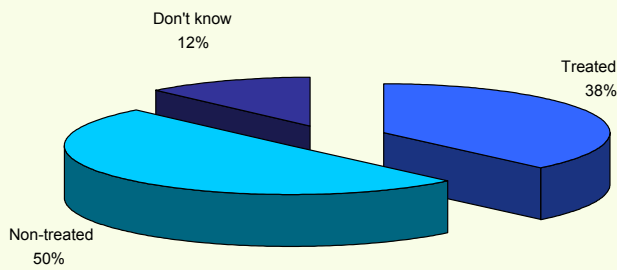


Fig. 3: Treatment of own water supply' on surveyed marae

- 4 marae (38%) of the 10 marae that supply their own water also treat their water in some way
- 5 marae (50%) with 'own water supply' do not treat their water in any way
- 1 marae was unsure if water supply is treated in any way.

Filtration, chlorine, UV, ozone, boil water

Of the 4 marae (38%) that treat their water in some way:

- 1.5 marae (33%) boil their water before use
- 0.5 marae (22%) use UV filtration system, and
- 2 marae (44%) are unsure of the exact treatment method.

FIGURE 4

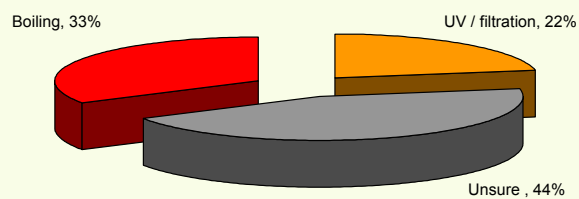


Fig. 4: Types of treatment on marae who treat their 'own water supply'

Who is responsible for treatment?

FIGURE 5

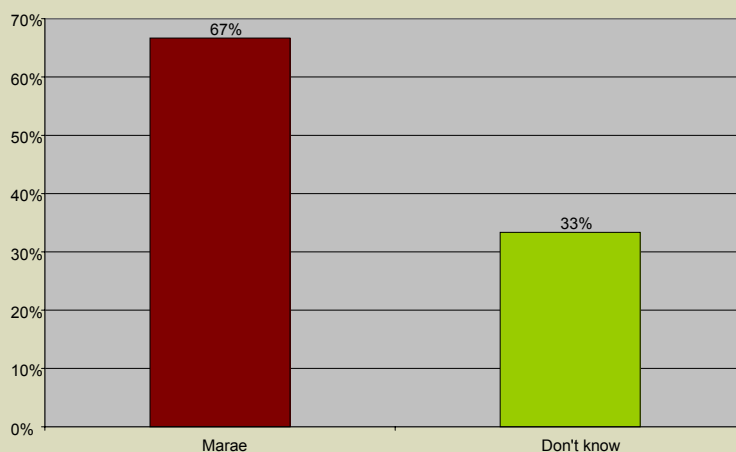


Fig. 5: Responsibility for treatment

Of the 4 marae that treat their 'own water supply':

- 3 marae stated that the marae undertakes the responsibility for treating the water
- 1 marae stated that they were unsure who was responsible for treating the water.

Are there any written instructions?

FIGURE 6

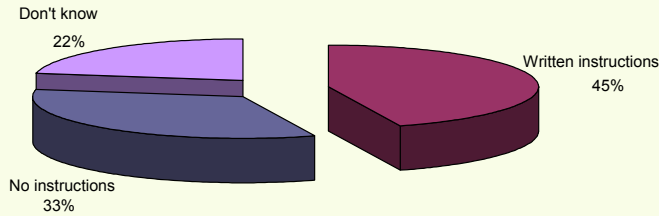


Fig. 6: Written instructions for water treatment

Of the 4 marae (38% of total surveyed) that treat their water:

- 2 marae (45%) have some form of written instructions on water treatment procedures
- 1.5 marae (33%) have no instructions for the treatment of their self supplied water
- 0.5 marae (22%) did not know whether there are instructions on the marae for the treatment of their self supplied water.

Is this person trained?

Of the 4 marae that 'treat their water':

- 2 marae have a trained person who administers the treatment for the water
- 1.5 marae do not have a trained person in place to treat water
- 0.5 marae are unsure of whether there is treatment let alone a trained person to administer the treatment
- This data set clearly mirrors the data set for the 'written instructions for the treatment of water' section as it shows that 45% have written instructions and have a designated trained person to administer the water treatment.

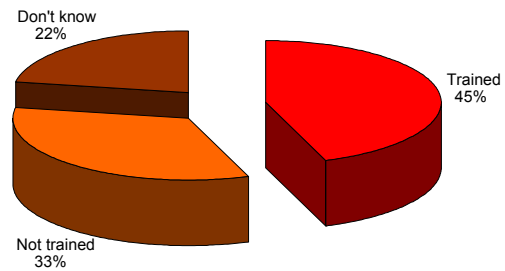


FIGURE 7

Fig. 7: Treated water and trained person

Q 31: Is the water tested?

FIGURE 9

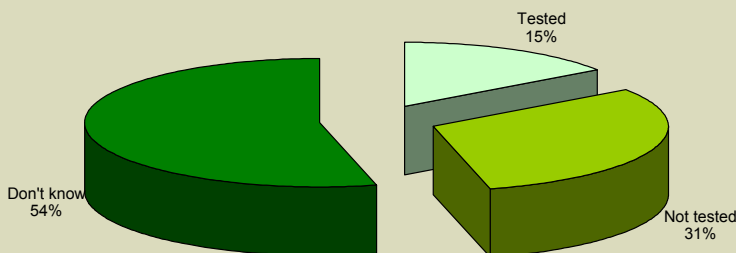
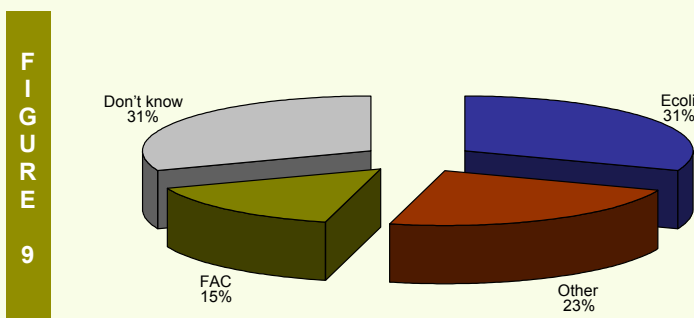


Fig. 8: Is the water tested?

- 3 marae (15%) of the 18 marae surveyed regularly test their drinking water (at least once every 6 months) or after heavy rains
- 6 marae (31%) of the 18 marae surveyed do not test
- 9 marae (54%) don't know whether testing is carried out by council or marae.

Tested for E-coli, FAC (Free Available Chlorine) or other?



Of the 3 marae (15%) that test water:

- 1 marae (31%) undertake some type of water testing mainly for E-coli
- 0.3 marae (15%) undertake FAC if required
- 0.7 marae (23%) undertake some other form of testing?
- 1 marae (31%) did not know.

Fig. 9: Water testing on marae

Frequency of test?

- 1 marae (33%) undertakes regular testing of water, i.e. at least once every 6 months or after heavy rains
- 2 of the 3 marae (66%) that test water, are unsure of the frequency of testing

Who does the testing? marae / Territorial Authority (TA)/Public Health Unit (PHU)/other?

- 50% of marae undertake their own testing
- The remaining marae undertake water testing relying on PHU or TA to test the water

Q 32: Is there any on-site water storage?

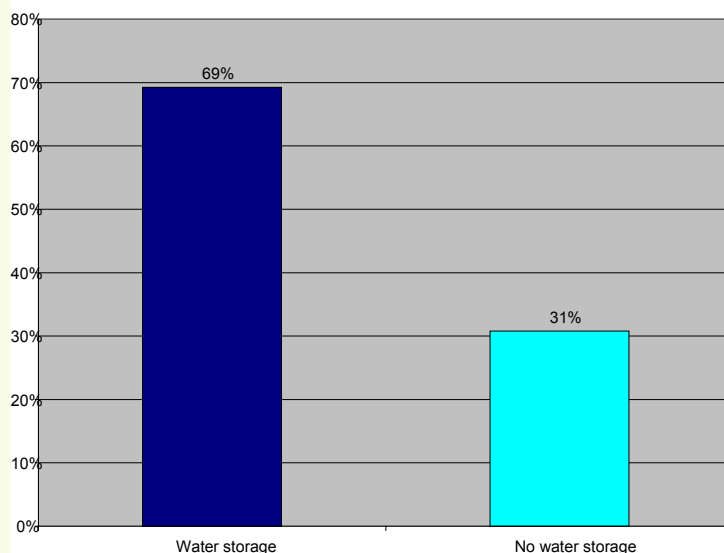


Fig. 10: Water storage on marae

Q 33: Is there an adequate supply of water?

12 marae (69%) of the 18 marae surveyed confirmed they have an adequate supply of water with 6 marae (31%) stating that they had an inadequate supply of water.

If no, what do you do?

Those marae with an inadequate water supply, outlined their contingency plan when water supply is low.

- One marae commented that they usually have an adequate water supply but if not then water transported in by tanker
- Bore water for toilets. If the marae runs out of water - water tankers are called in to fill tanks
- Using roof water from temporary wharekai until new wharekai is built. Enrolled in the Ministry Of Health Technical Assistance programme.

- 12 marae (69%) of the 18 marae have some form of water storage on site
- 6 marae (31%) do not have alternative water storage on site and rely solely on council supplied water.

Volume?

Of the 12 marae with alternative water storage on site most vary in size (volume) and the number of storage tanks. Additional comments

- Unsure of size
- Two x 5000 gallon tanks
- Two x 25000 litre tank
- Two x 6,000 gal water tanks
- 5000 gal tank.

PĀRONGO 5: FOOD HYGIENE EDUCATION & TRAINING

Q 34: How many people are involved in food preparation on the marae?

Responses ranged from:

- Average of 5 people at one time
- 4-40 depending on hui and whānau
- Food preparation between 10-15 people
- Catering setting tables approx 10
- Cleaning and washing between 10 - 15
- Varies depending on size of hui
- May get different cooks at each hui, depends whose available on the day
- Varies, dependant on size of hui
- 3 main cooks all trained in food safety
- Many people, depends whose around
- Up to 6 sometimes
- 4 - 5
- There are many workers with multiple responsibilities on the marae e.g. cook, builder, and maintenance worker in one
- Anyone from about 14 years up is able to work in the kitchen
- Depends on the size and number of people attending - usually between 2-20.

Q 35: Have any food handlers/cooks completed food hygiene training courses?

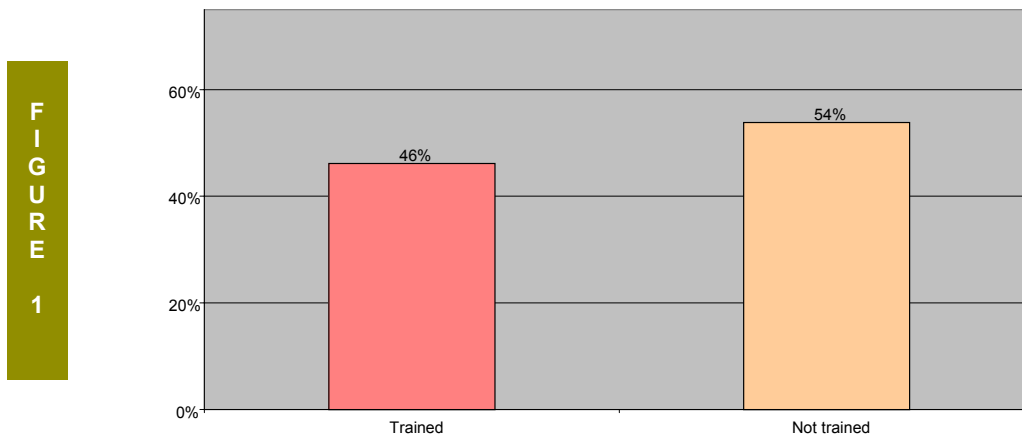


Fig. 1 Food handler / food hygiene training

- 8 marae or 46% of marae surveyed, confirmed they have someone who is trained in food hygiene
- 10 marae or 56% of marae had no one with formal training in food hygiene or preparation but everyone practiced basic health and safety in and around the kitchen and food preparation areas
- Some marae have access to qualified chefs and food industry people.

If yes please give details, what courses and number of people attended?

FIGURE 2

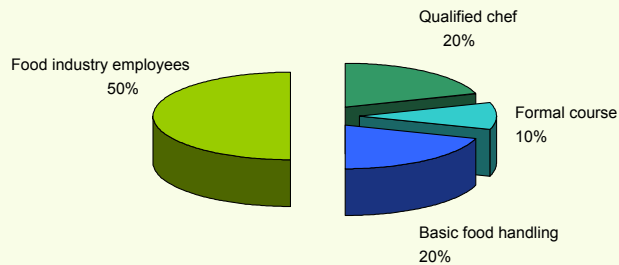


Fig. 2: Food handler / Food hygiene training attended by marae kaimahi

Note: Food industry workers includes meat handlers, butchers, food production employees and food related services and therefore have on job training in hygiene and food handling.

Comments and findings form the 8 marae that answered 'Yes' include:

- 1.5 marae (20%) has a qualified chef
- There's one chef, but he lives in Australia
- 4 marae (50%) have access to food industry employees
- Those working in the 'food industry' as employees usually guide whanau and workers
- Each one knows their role/job in the kitchen
- 1.5 marae (20%) have had cooks complete a basic food handling course, and the head cook has done further food courses
- Trainers were brought in to coach and inform kaimahi in nutrition
- At 1 marae, four people have completed a Southern Institute of Technology (SIT) food handling course.

Q 36: Is there any interest by the marae or cooks in completing food hygiene training in the future?

If yes, what type of training is important, e.g. formal, NZQA Cert or informal

- Formal training with a nationally recognised certificate (eg, New Zealand Qualifications Authority (NZFSA) qualification)
- Informal training (no formal qualification)
- Any training but mainly basic food safety and hygiene
- NZQA would be a bonus
- Not formal qualification
- Availability of people due to work commitments is an issue for some
- NZQA qualification and/or informal training
- Less formal training
- Free resources, rather than having to pay for it
- Both kinds, formal and informal training
- informal training could be incorporated into hui and workshops
- Training that is more holistic and covers all the aspects of life on marae
- Formal training is good but costs lots of money and would be reliant on those people attending, paying for it.

Survey findings:

12 marae out of 18 were interested in some type of training for marae kaimahi with the remaining 6 marae not interested in any type of training

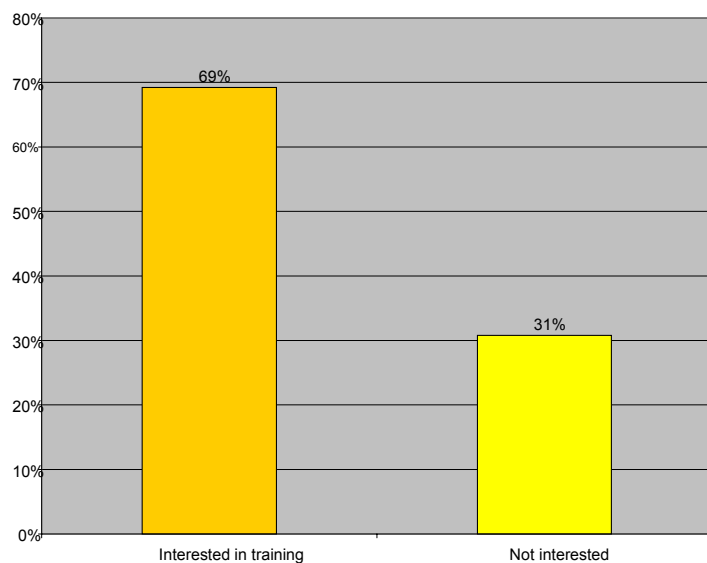
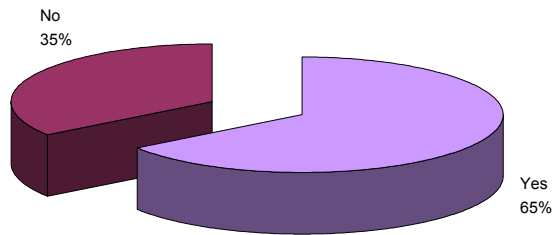


FIGURE 3

Fig. 3 Kaimahi interest in completing food hygiene training

Q 37: Have you heard of the NZ Food Safety Authority (NZFSA)?

FIGURE 4



Survey findings:
12 marae (65%) out of 18 have some knowledge of NZFSA

Fig. 4 Knowledge of NZFSA

Domestic Food Review?

Survey findings:
15 marae (85%) out of 18 were unaware or have no knowledge of the Domestic Food Review being undertaken by NZFSA

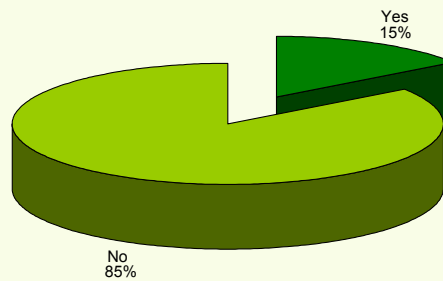


FIGURE 5

Fig. 5 Knowledge of the Domestic Food Review

Wild Food Review?

FIGURE 6

Survey findings:
14 marae (77%) out of 18 were unaware or have no knowledge of the Wild Food Review being undertaken by NZFSA

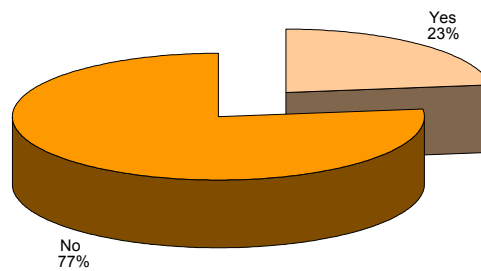


Fig. 6 knowledge of the Wild Food Review

Q 38: Would you be interested in a food safety resource covering marae catering?

All marae surveyed stated that they were interested and would like resources covering food safety and hygiene in and around the marae.

What do you think should be in a resource?

- Charts
- Pamphlets/books
- Badges
- Fridge magnets
- Hats
- Aprons – also helps to identify the workers
- Colour coded buckets/containers
- Where to purchase good hygienic containers at a reasonable cost
- Use celebrities/their programmes etc to help promote the safe food messages e.g. Mike King
- Recognition for the marae, acknowledging they had completed food hygiene training e.g. like KiwiHost, (some participants indicated this may need to be used cautiously)
- Useful tips from recognised people who work on the marae, (both local and national)
- Design changes for the kitchen with food hygiene in mind
- Policies, posters, aprons, thermometers, checklists, training
- Practical things which are easy enough for people to understand
- Heaps of pictures, simple messages that can be understood
- Posters/pamphlets
- Would like to see persons demonstrate food safety through workshops on marae
- Visual resources e.g. posters and booklets, e.g. like the fire booklet
- Posters, food handler guidebook
- Training
- Best practice guidelines for food handling, infection control
- Food information, guides

Additional comments

- Those interviewed felt it would be a good idea to run workshops for marae catering staff
- A whaea present felt the survey was good, but stressed importance on the interviewer. She felt the survey is relevant and necessary
- Kaumātua – think its good for awareness in kai
- Training resources could be useful to them, if kept simple
- No formal training
- Awareness tools that are easily understood by all users at the marae would be good.