

# Relative Significance of Dietary Sources of Nitrate in Improving Age-Old Workforce Efficiency

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**Abstract:-** Title: “Relative Significance of Dietary Sources of Nitrate in Improving Age-old Workforce Efficiency” Objectives: “To carry out clinical trials on patients with low SPo2 and PRbpm with as is clinical conditions to improve levels with Dietary Nitrate& see if same can be used for improving workforce efficiency in manufacturing industries” Methods: Random sample data collected for 65 cases involving different ages with low SPo2 and PRbpm as well as clinical conditions, with High blood Pressure, Diabetes etc. In the data collected for 65 cases, 35% were female patients and 66% were male patients. Among the sample cases selected 9% were people with diabetes, 1.5% had diabetes and high blood pressure, 7.5% had diabetes, high blood pressure, 1.5% had heart problems, 1.5% had heart problems and high blood pressure and 80% of cases would not have been affected by another disease.

Systematic clinical trials were performed in all the selected cases by accurately measuring their initial SPo2 and PRbpm levels and then by Dietary Nitrate doses at intervals of 5min., 10 min. and 15 min. each.

**Results:** With the doses of Dietary Nitrate, the mean of the SPo2 significantly improved from 97.42 to 98.55 and standard deviation decreased from 0.8820 to 0.7912 with no significant change in PRbpm. **Conclusion:** Based on the results from the data analysis, it has been found that 1) Dietary Nitrate can help improve low SPo2 status and has no adverse effect on PRbpm or other clinical conditions. 2) Age old industrial workforce loses their efficiency with clinical conditions. Changing their dietary habits to Dietary Nitrate reach food can improve the blood flow to the brain improving their mental and physical conditions, as they seem to act as antimicrobials in the digestive system.

**Keywords:-** Dietary Nitrate, SPo2, PRbpm, nitric oxide, beetroot juice, Workforce efficiency.

## I. INTRODUCTION

The paper is regarding study of impact of Dietary Nitrate on rising the SPo2 level in as is clinical condition of a patient with none facet impact on PRbpm or the other clinical conditions and recommending an equivalent for rising work potency older previous force by dynamical their dietary habits. During this project varied clinical trials were conducted within the completely different age teams & weights with as is clinical conditions.

### Descriptive Statistics: Age

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
Age	65	0	48.52	2.19	17.65	12.00	42.00	52.00	58.00	88.00

### Descriptive Statistics: Weight

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
Weight	65	0	59.98	1.60	12.88	30.00	50.00	60.00	70.00	105.00

Nitrates (NO<sub>3</sub>) contain one gas atom and 3 O atoms. Nitrates area unit weak, this implies they're stable and unlikely to vary and injury. Nitrites area unit created incessantly by chemical reaction of a gas and by reduction of nitrate by microorganism commensal within the mouth and viscus cavity. Nitrates and nitrites area unit compounds that occur naturally within the soma and in bound foods, like vegetables. However, oral microorganism or enzymes within the body will convert them into nitrites, and this may be dangerous. Nitrites will be reborn into gas, that advantages the body.

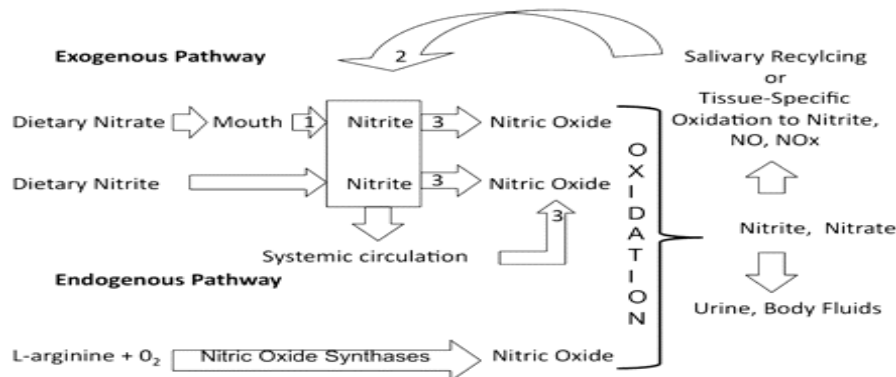


Fig. 1.1 Nitrates, Nitrites and Nitric Oxide formation

The major sources of nitrites embody processed vegetables, fruits, and meat. regarding eightieth of dietary nitrates area unit found in vegetable consumption; beetroot or beetroot juice will be used for this purpose because it contains high levels of nitrates. Inorganic nitrate (NO<sub>3</sub><sup>-</sup>) is found in high concentrations of foliose inexperienced vegetables, like spinach and rocket, furthermore as root vegetables like beetroot. During the literature review it was calculable that beetroot can be accustomed to scale back the price of O exercise by five.4%, increase fatigue time by V-J Day, and improve sprinting performance by four-dimensional. As a part of the risky corona-infected teams, the bulk of the old, obese, and patients with high {blood pressure|vitalsign|pressure|pressurelevel|force per unit area unit} or polygenic disorder area unit a lot of at the risk of SPo<sub>2</sub> deficiency and are usually treated with intensive ventilation. Equally in business older staffs lose their work efficiencies. Thanks to their vigor. Dietary-based supplements, that contain vital active chemicals, will promote performance and health advantages within the most vulnerable cluster, and therefore, the same will be accustomed to improve work potency older previous staff. SPo<sub>2</sub> level is measured by Pulse Oximetry, that may be a check accustomed live blood O (oxygen saturation) level.

## II. LITERATURE REVIEW

Numerous studies have shown that dietary nitrate can improve body function by increasing blood flow and improving oxygen consumption. Nitrate helps to improve metabolism.

A. Patrician & E. Schagatay in their research paper entitled, "Diet nitrate enhaser arterial oxygen saturation after apnea dynamic" stated that dietary nitrate has been shown to reduce the cost of oxygen in various conditions.

In their study they had concluded that BR Capsule was found to elevate SaO<sub>2</sub> after 15 these effects suggest oxygen-saving effect of dietary nitrate supplementation, which may have a positive effect on the performance of complete cessation. (Trail Mor 8 to 9 in between)

1. First 5-minute reading
2. 10 second second reading
3. Third 15 Min Reading

Julien Aucouturier (2015) states in her article, "The effect of dietary nitrate supplementation on high-intensity exercise", Dietary nitrate (NO<sub>3</sub>) supplementation has been shown to increase exercise tolerance and improve oxidative efficiency during exercise with exercise. -aerobic in healthy subjects. They have explored the hypothesis that adding a 3-day supplement to NO<sub>3</sub>-rich beetroot juice (BJ) - can improve endurance for strenuous exercise.

Oliver M. Shannon (2017) concludes his paper "Effects of Dietary Nitrate Supplementation on Physiological Responses, Cognitive Function, and Exercise Performance at Moderate and Very-High Simulated Altitude" that, Relative to placebo, NO<sub>3</sub><sup>-</sup> supplementation reduce state steady state' VO<sub>2</sub>, boundary elevation and muscle oxygenation, and improved TT function during the activity of the pedestrian type in a limited and high-performance range. The addition of NO<sub>3</sub><sup>-</sup> also produced changes in cerebral blood oxygenation, although no differences in brain function were observed compared with placebo. These findings suggest that NO<sub>3</sub><sup>-</sup> supplementation may provide some beneficial physiological effects for mountain-type individuals at relatively high altitudes.

The total oxygen uptake (VO<sub>2</sub> max) of a person increases dramatically with controlled exercise constantly increasing and growing. Not only is the extended VO<sub>2</sub> max, but also the human respiratory volume and the minute heart rate indicative of increased contact. High aerobic capacity is converted into a well-anaerobic dose (Akgün, 1994). The amount of oxygen carried in terms of hemoglobin in the blood is called SpO<sub>2</sub> and this forms a key mechanism for the transport of oxygen to cells (SpO<sub>2</sub>) was used to show that a noninvasive measurement was obtained using a pulse oximeter in this study). Oxygen saturating measurements provide details on hypoxia (Giuliano et al., 2005; Hakemiet al., 2005) Measuring blood gas levels and oximetry of oxygen concentrations. There are advantages and disadvantages to choosing both parties. The most important point is to know the exact amount of oxygen saturation obtained by pulse oximetry and the factors involved. In several studies, factors affecting the accuracy of pulse oximetry measurements have been investigated and evaluated in comparison with blood gas (Louise et al., 1998; Van de Louwet al., 2001). The use of pulse oximetry in assessing oxygen saturation provides an individual's continuous measure of saturation and pulse without attack

effort (Woodrow, 1991). The purpose of this study was to investigate changes in oxygen supplementation by the effect of temporary exercise on soccer players and to sit and provide information to athletes, coaches and scientists about the emerging effects.

Mr. Jon O. Lundberg, Mattias Carlstrom and Eddie Weitzberg (2018) explain in their article "Metabolic Effects of Dietary Nitrate in Health and Disease", Nitric oxide (NO), made with L-arginine and oxygen by NO synthases, is a pleiotropic signaling molecule involved in cardiovascular regulation. An alternative to this free radical construction was recently considered. Inorganic anions nitrate (NO<sub>3</sub><sup>-</sup>) and nitrite (NO<sub>2</sub><sup>-</sup>), derived from food and endogenous sources, produce NO bioactivity in a process that involves oral bacteria that appear to be antagonistic and carry enzymes in the blood and tissues. Described cardio-metabolic effects of dietary nitrate from experimental and clinical studies include low blood pressure, complete end-of-life performance, increased physical activity, and reversible metabolic syndrome, and anti-diabetic effects. Methods that work with the positive effects of nitrate are revealed and include mitochondrial respiratory interactions, the formation of key regulatory pathways, and a decrease in oxidative stress. Here they had reviewed the latest developments of the nitrate-nitrite-NO method, which focuses on metabolic effects in health and disease.

Naveen Lohan, Sandeep Nandal, Anshul Bhandari (2016) described in their research article entitled "Performance and Health Benefits of Dietary Nitrate Supplementation in Older Adult: A Systematic Review" October 2017 conducted experiments with Nitrate Supplementation (NO<sub>3</sub><sup>-</sup>) rich beetroot. juice has been shown to improve exercise performance and cardiovascular response (CV), due to increased availability of nitric oxide (NO). However, it is unclear whether these benefits are significant for older adults with age-related reductions in NO and a higher risk of disease. This systematic review examines 12 random, crossover, control trials, investigations of NO<sub>3</sub><sup>-</sup> dietary support for adults and its benefits on physical and cognitive functioning, as well as CV, cerebrovascular and metabolic health. Four studies found improvement in physical activity (period of fatigue) following NO<sub>3</sub><sup>-</sup> dietary supplementation in older adults. The benefits of mental functioning were unclear. Six studies reported improvements in CV health (blood pressure and blood flow), and six did not improve. One study showed an improvement in cerebrovascular health and two found no improvement in metabolic health.

SatnamLidder and Andrew J. Webb (2012) "Vascular effects of dietary nitrate (as found in raw vegetables and beetroot) via nitrate-nitrite-nitric oxide pathway" August 2012 claim the discovery of nitrate dietary (uncommon) nitrate Significant effects of blood vessels emerged in the recent recognition of the method of 'nitrate-nitrite-nitric oxide (NO)'. Dietary nitrate has been shown to have a variety of beneficial effects on muscle, including lowering blood pressure, preventing platelet aggregation, preserving

or improving endothelial dysfunction, increasing exercise performance in healthy people and patients with vascular disease. Pre-clinical studies with nitrate or nitrite also show the potential to prevent ischemia-reperfusion injury and reduce body stiffness, inflammation and insufficient size. However, there is a need for better evidence of more complex conclusions than in epidemiological studies. While this suggests a reduction in the risk of cardiovascular and high intake of nitrate-rich vegetables (such as a Mediterranean diet), some have suggested that there may be fewer positive and negative interactions with dietary nitrate and cancer, but this remains unacceptable. Interaction with other nutrients, such as vitamin C, polyphenols, and fatty acids can enhance or prevent these effects. To provide easy guidance on nitrate intake from a variety of vegetables, they have developed Nitrate 'Veg-Table' with 'Nitrate Units' [1 mmol unit of nitrate (62 mg)] to achieve nitrate intake that may be sufficient to benefit, but also to reduce the risk of potential adverse effects from over-importation, given the available evidence.

Filip J. Larsen, Eddie Weitzberg, Jon O. Lundberg, Björn Ekblom (2009) "Dietary nitrate reduces total oxygen utilization while maintaining physical activity through exercise" explained that anion nitrate - which is abundant in our diet - has recently increased emerges as the main nitric oxide (NO) synthase pool of Independent NO production. Nitrate is reduced step by step in vivo into nitrite and then NO and possibly other bioactive nitrogen oxides. This reduction method is developed during low oxygen uptake and acidosis. Recent research shows a decrease in oxygen consumption during a light workout caused by dietary nitrate. They continued to study the effects of dietary nitrate on various body and chemical parameters during strenuous exercise. Nine healthy, non-smoking volunteers (30 ± 2.3 years, VO<sub>2</sub>max 3.72 ± 0.33 L / min) participated in the study, which had a randomly designed crossover design. Subjects received dietary supplementation with sodium nitrate (0.1 mmol / kg / day) or placebo (NaCl) two days prior to the test. This dose corresponds to the amount found in 100-300 g of nitrate-rich vegetables such as spinach or beetroot. Exercises had more exercise for fatigue with a combined arm and a folding leg at two different ergo meters. Dietary nitrate reduced VO<sub>2</sub> max from 3.72 ± 0.33 to 3.62 ± 0.31 L / min, P=0.05. In addition to the reduction of VO<sub>2</sub>max fatigue duration usually increased after the addition of nitrate (524 ± 31 vs 563 ± 30 s, P = 0.13).

There was an association between a change in fatigue and a change in VO<sub>2</sub>max (R<sup>2</sup> = 0.47, P = 0.04). A moderate nitrate intake significantly reduced VO<sub>2</sub>max during exercise using a heavy working muscle mass. This reduction is due to the tendency for extra time of fatigue which means that there are two different mechanisms involved: one that lowers VO<sub>2</sub>max and the other that promotes strong muscle function.

Faseeha Aman, Sadia Masood (2020) "How can a nutritious diet help fight the COVID-19 epidemic" explored the importance of nutrition to boost the immune system and provided appropriate and accurate dietary guidelines on food

and food safety resistance to COVID-19.

Andreas Zafeiridis (2016) "Effects of dietary nitrate (beetroot juice) on exercise performance: A review" has shown that Nitric oxide (NO) is a potent vasodilator that increases blood flow and creates various internal cellular actions such as mitochondrial proliferation. and contractile efficiency. NO bioavailability can be increased by direct use of dietary nitrate and its subsequent reduction into nitrite, the regulator of NO-induced signaling hypoxic. Consumption of dietary nitrate lowers blood pressure, prevents ischemia-reperfusion injury, and improves endothelial dysfunction. Recently, the popularity of dietary nitrate as an ergogenic aid has greatly increased. Most exercise studies have used dietary nitrate in the form of beetroot juice containing 5-8 mmol of nitrate and a few studies have used sodium and potassium nitrate (8-10 mg / kg). The most prominent and consistent effects of nitrate supplementation are reduced oxygen costs for exercise and increased fatigue time in lower workloads. This effect was seen after one bolus (2-3 h before exercise) or long-term supplementation (2-15 days). The ergogenic effects of beetroot supplementation appear to be dose-dependent and are often seen after long-term ingestion (approximately 6 days), with strenuous exercise and in well-underweight people. The ergogenic value of adding beetroot to endurance athletes is unclear; most studies showed no improvement and a few studies performed improved performance (0.4% to 3%) during- and grade-level tests.

Clearly, more research is needed to document (i) the appropriate dose of beetroot supplement to improve athletic performance, (ii) the effects of nitrate use on diet in training, (iii) the effectiveness of beetroot supplementation in increasing exercise tolerance for people with chronic illness, and (iv) long-term safety battery usage.

Some recent research has shown how long-term airway support is harmful to health due to lung bacteria responding to high oxygen concentrations. Oxygen treatment may cause Staphylococcus infection, which can lead to lung damage.

Coughing and hypoxemia, or shortness of breath, are two of the most common symptoms of corona virus. Even those with minor viral infections have experienced weakened lung function from weeks to several months in length.

### III. METHODS

This paper is about improving work efficiency of age old work force in industries with low SPO2 and PRbpm and as is clinical conditions by changing their dietary habits and including Dietary Nitrate in their regular diets. In these trials randomized sample data was collected for 65 cases with different sexes covering different age groups with low SPO2 and PRbpm with as is clinical conditions such as high blood pressure, diabetes etc. Out of the 65 random data collected 35% were female cases and 66% were male cases. Among the sample cases selected 9% were people with diabetes, 1.5% had diabetes and high blood pressure, 7.5% had diabetes, high blood pressure, 1.5% had heart problems, 1.5% had heart problems and high blood pressure and 80% of cases would not have been affected by another disease.

Systematic clinical trials were performed in all selected cases by accurately measuring their initial SPO2 and PRbpm. During experimentation they were given the doses of Dietary Nitrate at intervals of 5min., 10 min. and 15 min. each.

SpO2 measurements were taken on the front finger before exercise temporarily and immediately after the test. The topic was informed of the purpose and what was measured before starting the processes. The researcher informed the article on the subject that the investigation does not give any suffering and pain that puts him on his finger first. Because the dry liquid in the probe would detect it lightly and create incorrect measurements, the probe was controlled and cleaned before each measurement. To prevent faulty oximeter measurements, it is important not to use fluorescent light bulbs in natural light where measurements are taken.

### IV. DATA COLLECTION & ANALYSIS

The data was collected for 65 cases as a pilot study out of which 23 were females and 42 were males and is as follows:

WADA AGRO PRODUCTS													
Dietary Nitrate Can Help Improve Condition of COVID-19 Patients													
Dietary Nitrate Can enhance physical performance by increasing blood flow and improving the use of oxygen. Moreover, nitrate also helps improve metabolism.													
After Dietary Nitrate													
						Initial		Excer/ 5 Min		Excer/ 10 Min		Excer/ 15 Min	
Sr	Gender	Age	Any COP	Weight	Height	SPo2	PRbpm	SPo2	PRbpm	SPo2	PRbpm	SPo2	PRbpm
1	Male	52	NO	75	5.3"	98	67	98	66	99	66	99	67
2	Male	43	NO	77	5.9"	97	83	98	93	98	91	99	95
3	Male	51	NO	55	5.5"	98	85	98	85	99	84	99	83
4	Female	14	NO	43	4.10"	98	94	98	94	99	95	99	93
5	Male	46	NO	55	5.3"	97	95	98	95	98	94	99	93

Sl	Gende	Ag	Any COP	Weig	Heig	After Dietary Nitrate							
						Intial		Excer/ 5 Min		Excer/ 10 Min		Excer/ 15 Min	
						SPo	PRbp1	SPo	PRbp1	SPo	PRbp1	SPo	PRbp1
6	Male	55	NO	72	5.3"	98	74	98	84	99	84	99	83
7	Male	44	NO	52	5.4"	96	83	97	82	97	81	98	81
8	Male	57	BP,Diabe Sugar	70	5.7"	98	67	99	67	99	66	99	65
9	Female	41	BP,Diabe Sugar	70	5.3"	98	80	99	78	99	77	99	77
10	Male	60	NO	60	5.8"	98	83	99	83	99	82	99	82
11	Male	61	BP,Diabe Sugar	72	5.5"	97	67	98	64	98	63	98	63
12	Female	55	NO	67	5.1"	96	83	97	82	97	82	98	82
13	Male	60	BP,Diabe Sugar	74	5.3"	98	80	98	78	99	79	99	78
14	Male	52	NO	75	5.6"	97	77	98	76	98	76	98	75
15	Female	45	NO	64	5.2"	98	78	98	76	99	75	99	75
16	Male	55	BP	64	5.9"	97	77	98	80	98	80	99	78
17	Male	19	NO	41	5.10"	97	77	98	78	98	81	99	80
18	Female	50	NO	45	5.8"	98	66	98	66	98	65	99	64
19	Male	18	NO	45	5.10"	98	82	98	83	99	82	99	82
20	Male	55	NO	68	5.8"	98	94	98	95	99	98	99	98
21	Male	61	NO	58	5.1"	98	80	98	85	99	85	99	85
22	Male	53	NO	50	5.4"	98	78	99	79	99	80	99	80
23	Male	56	NO	72	5.5"	95	92	97	94	97	98	97	98
24	Female	24	NO	40	5.3"	98	99	99	100	99	100	99	100
25	Female	50	NO	55	50"	98	99	99	99	99	100	99	100
26	Male	56	NO	68	5.5"	98	82	99	83	99	84	99	84
27	Male	56	NO	68	5.5"	98	69	99	70	99	70	99	70
28	Female	77	NO	70	5'	96	77	97	77	97	77	97	77
29	Female	51	NO	50	5.3"	98	66	99	67	99	67	99	67
30	Male	79	NO	70	5.3"	96	76	97	77	97	77	97	77
31	Male	25	NO	59	5.5"	97	77	98	78	98	78	98	78
32	Male	34	NO	75	6'	98	112	99	113	99	113	99	113
33	Male	62	NO	60	5.4"	94	76	95	77	95	77	95	77

After Dietary Nitrate													
Sl	Gender	Age	Any COP	Weight	Height	Intial		Excer/ 5 Min		Excer/ 10 Min		Excer/ 15 Min	
						SPO	PRbpi	SPO	PRbpi	SPO	PRbpi	SPO	PRbpi
34	Female	45	NO	50	5.1"	98	74	99	75	99	75	99	75
35	Male	55	Heart,BP, Diabet	80	5.6"	96	97	97	98	97	98	97	98
36	Male	19	NO	50	5.1"	98	81	98	82	98	82	98	82
37	Female	17	NO	45	5.1"	98	82	99	83	99	83	99	83
38	Female	12	NO	30	4.1"	98	76	99	77	99	78	99	78
39	Female	20	NO	39	5.1"	98	76	99	77	99	77	99	77
40	Male	15	NO	35	5.3"	98	81	99	82	99	82	99	82
41	Female	43	NO	45	5.1"	98	91	99	92	99	92	99	92
42	Male	44	NO	70	5.6"	98	63	99	64	99	64	99	64
43	Female	35	NO	60	5.1"	98	82	99	83	99	83	99	83
44	Female	75	BP	60	5.1"	98	77	99	78	99	78	99	78
45	Male	66	Heart	50	5.3"	98	85	99	86	99	86	99	86
46	Female	60	NO	55	5.3"	98	75	99	76	99	76	99	76
47	Male	46	NO	65	5.5"	97	80	98	81	98	81	98	81
48	Female	37	NO	55	5.1"	98	73	99	74	99	74	99	74
49	Male	75	BP	60	5.5"	98	70	99	71	99	71	99	71
50	Female	65	BP,Diabe	80	5.1"	97	93	98	94	98	94	98	94
51	Male	73	BP	61	5.5"	97	65	97	66	97	66	97	66
52	Male	52	BP	65	5.3"	96	96	97	96	97	96	97	96
53	Female	45	NO	48	5.2"	98	103	99	103	99	103	99	103
54	Female	23	NO	51	5.1"	98	99	99	77	99	78	99	78
55	Male	19	NO	53	5.4"	97	66	98	67	98	67	98	67
56	Male	59	NO	55	5.1"	96	91	97	92	98	92	98	92
57	Female	54	NO	60	5.1"	97	93	98	94	98	94	98	94
58	Male	50	NO	68	5.11"	98	77	98	82	99	84	99	84
59	Male	53	NO	70	5.8"	97	77	97	101	98	82	98	83
60	Male	52	NO	69	5.3"	98	78	99	80	99	80	99	80
61	Male	55	NO	65	5.6"	98	102	99	103	99	102	99	102
62	Male	57	BP	105	5.6"	96	83	98	77	98	77	98	78
63	Male	51	NO	49	5.2"	98	77	99	77	99	78	99	77
64	Male	88	NO	51	5.1"	97	67	98	67	99	67	99	68
65	Female	77	NO	61	5'	97	68	98	68	98	69	99	69

TABLE4.1 Data collection for initial condition and different trials taken

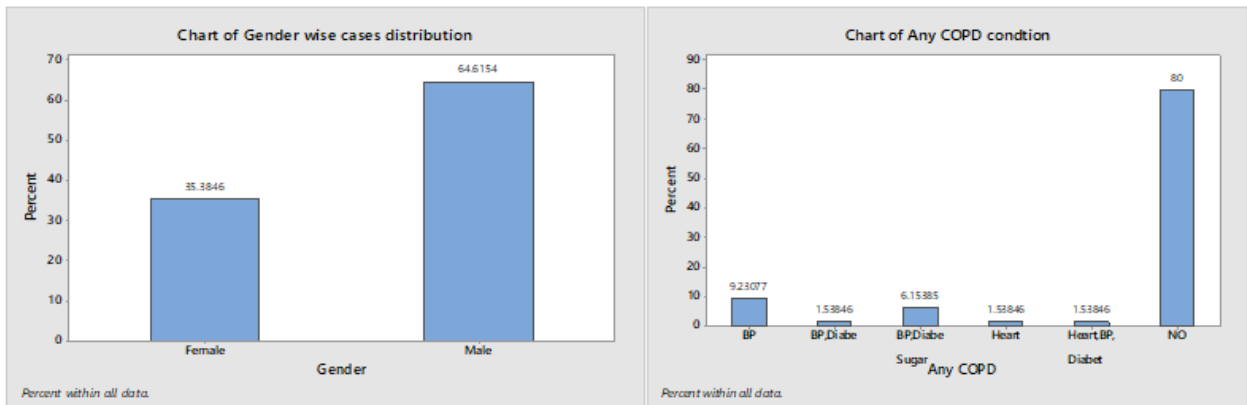


FIGURE 4.1 Chart for gender wise cases distribution and their COPD condition

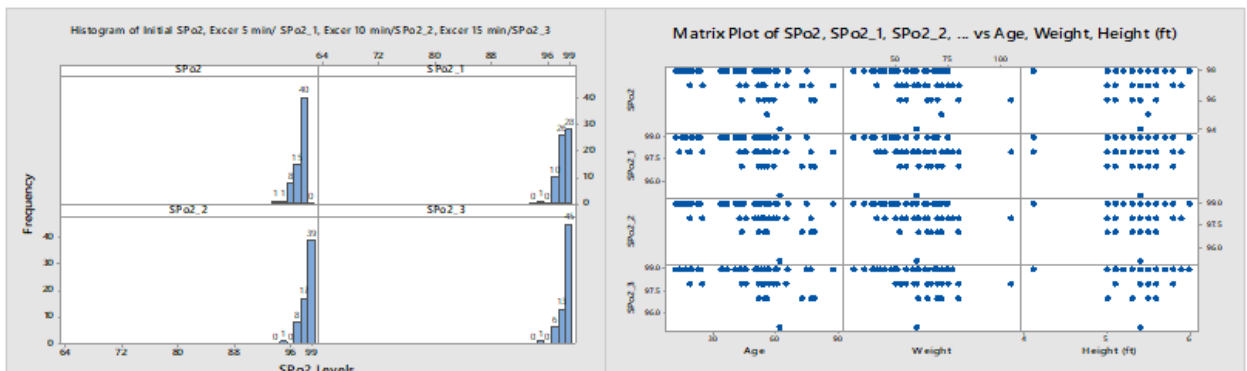


FIGURE 4.2 Changes in SPo2 level in different time interval & distribution with respect age, weight & height

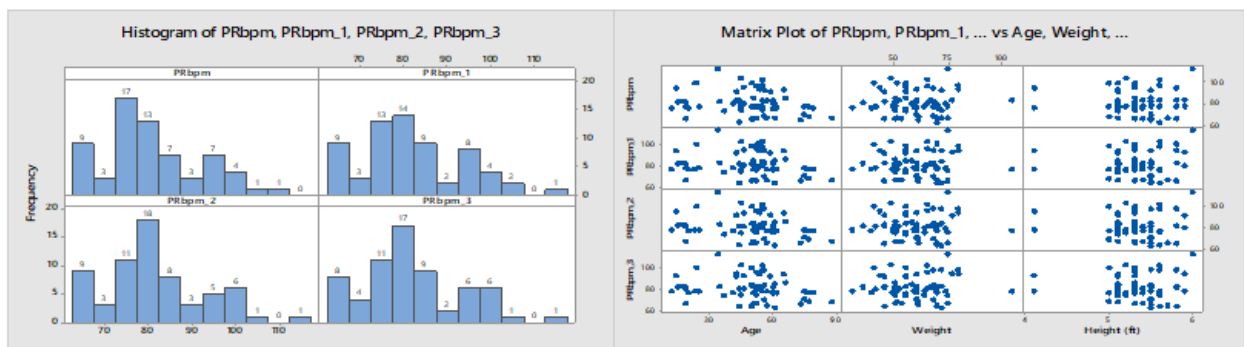


FIGURE 4.3 Changes in PRbpm level in different time interval & distribution with respect age, weight & height

V. RESULTS

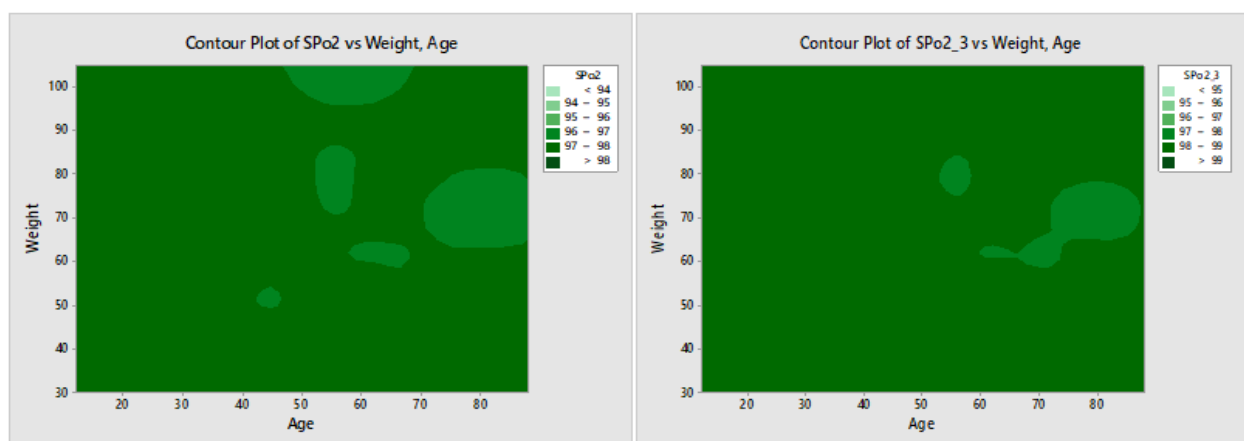
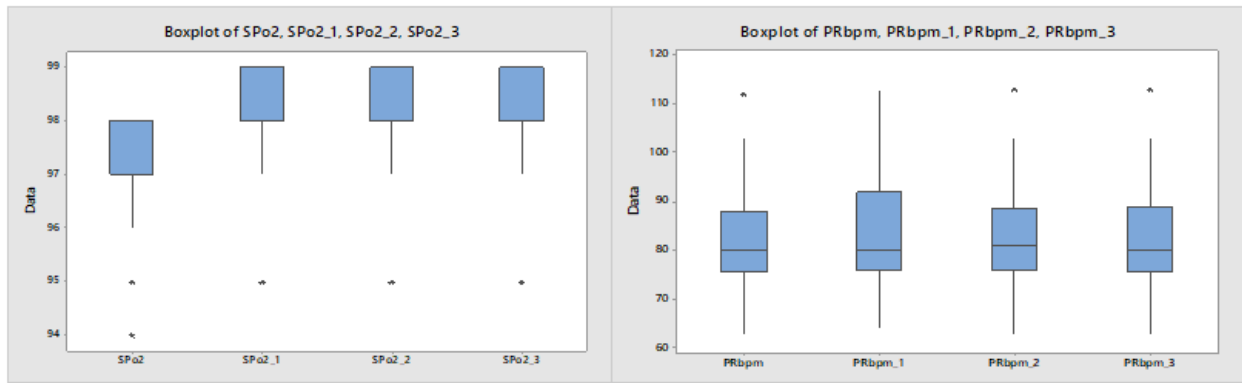
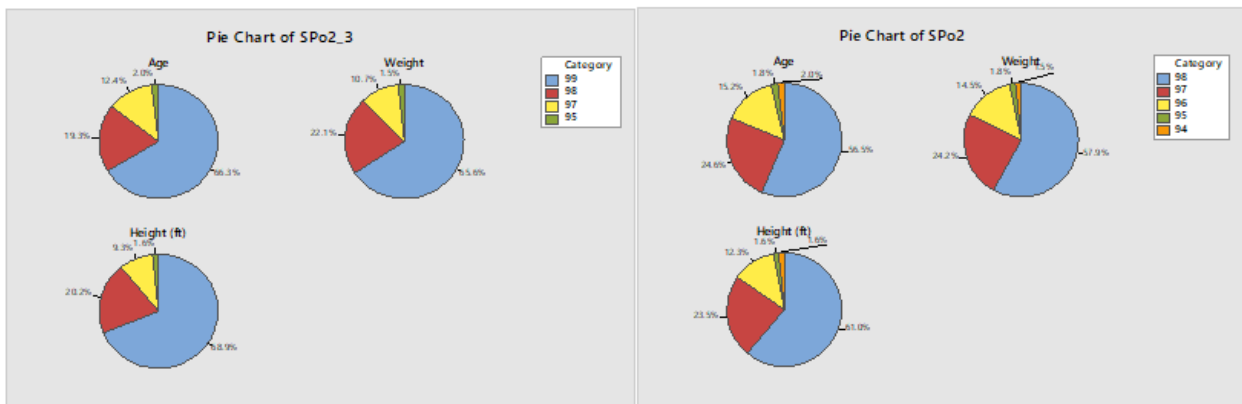


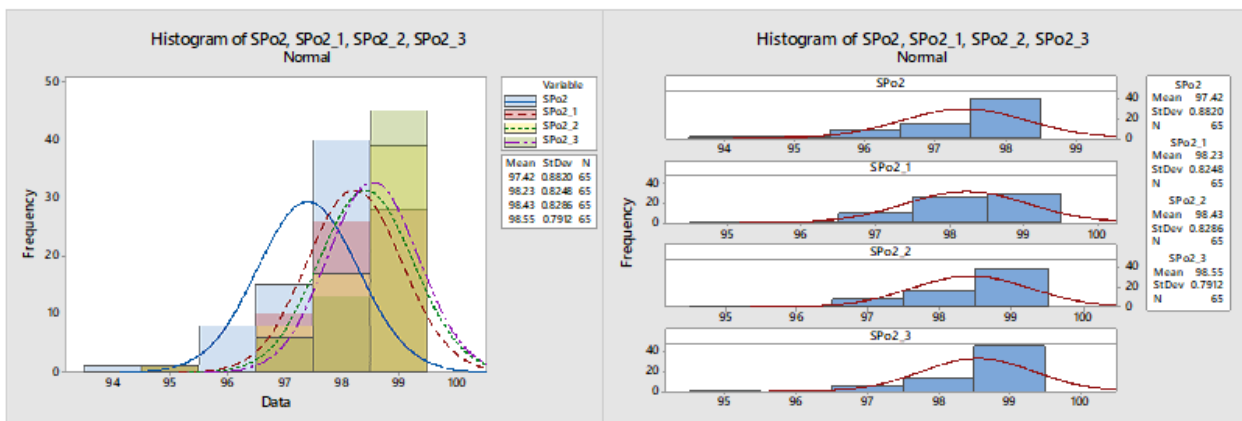
FIGURE 5.1 contour plots for change in SPo2 with respect to Weight and Age before and after trial



**FIGURE 5.2**Box & Whisker plot for change in SPO2 and PRbpm during different trials



**FIGURE 5.3**Pie Chart for change in SPO2 with respect to Age, Weight and Height during subsequent trials



**FIGURE 5.4**Histogram for change in mean and standard deviation for changes in SPO2 during subsequent trials

From the above graphs the results depict that with the doses of Dietary Nitrate, the mean of the SPO2 significantly improved from 97.42 to 98.55 and standard deviation decreased from 0.8820 to 0.7912 with no significant change in PRbpm.

On the basis of results from data analysis, it was found that 1) Dietary Nitrate can help to improve work efficiency of age old work force in an industry by changing their dietary habits.

2) Dietary nitrate supplement may also help to improve condition of Covid-19 patient with the low SPO2 level and has no side effect on the PRbpm or any other clinical conditions.

## VI. DISCUSSION

After reading the foremost relevant literature from varied analysis papers, Dietary Nitrate will facilitate improve the work potency of the age recent workforce in associate degree business by dynamic their dietary habits. this might additionally facilitate condition of a Covid-19 patient UN agency features a low SPO2 level and has no adverse impact on PRbpm or different clinical conditions. Dietary Nitrate supplementation will facilitate forestall the facet effects of long airway support. Dietary nitrate helps to market metabolic process muscle disfunction that contributes to the problem of relieving patients from airway obstruction. "Our findings area unit important seeable of the final work potency losses facing by the business with the growing age



of the staff. additionally this clinical study might facilitate the fight current epidemic of COVID-19. It also can be useful for people that are diagnosed with COVID-19 however don't have any symptoms. presently the COVID-19 epidemic may be a international challenge. , gender, health standing, manner and drugs. Human nutrition has been used as a guarantee of stability throughout the COVID-19 epidemic. it affects the system, thus it's the sole property thanks to survive the present state to strengthen the system. while not water-soluble vitamin, that is one in all the most effective ways in which to spice up the system, a correct diet will make sure the body's system. Similarly, in any organization the potency of staff decreases with an equivalent factors like age, gender, health standing, manner and drugs which might even be improved by dynamic staff feeding habits either through industrial cakes or through education to employees. This study also will facilitate the scientist to change the variability of various supplements as acceptable and therefore the impact on metabolism and to assess changes in worker well-being over a amount of your time before and when feeding habits.

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